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(21) International Application Number: PCT/US98/06955 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/838,821 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)		
(57) Abstract <p>Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.</p>		

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5 FIELD OF THE INVENTION

BACKGROUND OF THE INVENTION

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent
35 discloses a "signal sequence trap" which selectively identifies ESTs for secreted

proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

 In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In other embodiments, the present invention provides an isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 30 or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide
 comprising a nucleotide sequence which hybridizes to a sequence selected from the group
 consisting of:

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 NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
 NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID
 NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID
 5 NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;
 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described
 polynucleotides.

10

DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

15 Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.)
 followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BV31	18	CB302	35	BZ83	52	CD244
	2	BV34	19	CB318	36	BZ87	53	CD265
20	3	BV37	20	CB321	37	CB15	54	BT217
	4	BV45	21	CB96	38	CB2	55	BV278
	5	BV8	22	CB98	39	CB44	56	BV280
	6	BV93	23	BZ42	40	CC11	57	BV282
	7	BV99	24	BZ53	41	CC182	58	BV285
25	8	CB100	25	BZ56	42	CC298	59	BV286
	9	CB107	26	BZ6	43	CC310	60	BV291
	10	CB110	27	BZ607	44	CC323	61	BV295
	11	CB114	28	BZ61	45	CC332	62	BW389
	12	CB118	29	BZ62	46	CC335	63	BX135
30	13	CB123	30	BZ641	47	CC338	64	BX141
	14	CB129	31	BZ644	48	CC41	65	BX148
	15	CB137	32	BZ72	49	CC52	66	BZ1
	16	CB239	33	BZ74	50	CD107	67	BZ16
	17	CB259	34	BZ82	51	CD205	68	BZ187

	69	BZ19	103	CE159	137	CH315	171	CC194
	70	BZ205	104	CE2	138	CH325	172	CC198
	71	BZ222	105	CE347	139	BZ568	173	CC199
	72	BZ230	106	CE36	140	BZ578	174	CC205
5	73	BZ234	107	CE40	141	BZ588	175	CC215
	74	BZ244	108	CE87	142	BZ597	176	CC253
	75	BZ269	109	CG1	143	BZ598	177	CC258
	76	BZ280	110	CG44	144	CH637	178	CC259
	77	BZ288	111	CG60	145	CH644	179	CC265
10	78	BZ304	112	CG68	146	CH699	180	CC288
	79	BZ328	113	BP202	147	CI240	181	CC95
	80	BZ331	114	BP242	148	CI247	182	CC96
	81	BP646	115	BP243	149	CJ1	183	CD311
	82	BP652	116	BZ444	150	CJ19	184	CD323
15	83	BP656	117	BZ453	151	CJ24	185	CH338
	84	BP666	118	CC233	152	CJ27	186	CH355
	85	BP667	119	CC242	153	CJ3	187	CH377
	86	BP674	120	CC247	154	CJ37	188	CH421
	87	BP695	121	CC344	155	CJ42	189	CH425
20	88	BP705	122	CC346	156	CJ44	190	CH522
	89	BP713	123	CC351	157	CJ49	191	CH541
	90	BP720	124	CC359	158	CJ50	192	CH555
	91	BP750	125	CC364	159	CJ55	193	CH558
	92	BP754	126	CC365	160	CJ6	194	CH582
25	93	BW143	127	CC374	161	CJ76	195	CH595
	94	BR307	128	CE303	162	CJ77	196	CH720
	95	BR309	129	CE328	163	CJ84	197	CH723
	96	BR312	130	CG199	164	CJ86	198	CH724
	97	BR318	131	CG209	165	CJ91	199	CH735
30	98	CB187	132	CG210	166	CC111	200	CH742
	99	CB190	133	CG350	167	CC118	201	CI126
	100	CB204	134	CG354	168	CC120	202	CI129
	101	CB213	135	CG426	169	CC126	203	CI133
	102	CE120	136	CH303	170	CC130	204	CI181

	205	CI229	239	CG160	273	CI395	307	CJ397
	206	CI25	240	CG175	274	CI407	308	CJ400
	207	CI52	241	CG176	275	CI411	309	CJ404
	208	CI84	242	CG180	276	CI437	310	CJ415
5	209	CI91	243	CG279	277	CI443	311	CJ420
	210	BP163	244	CG292	278	CI444	312	CJ424
	211	BP175	245	CG300	279	CI459	313	CJ434
	212	BP199	246	CG301	280	CI480	314	CJ454
	213	BP272	247	CG314	281	CI490	315	CJ457
10	214	BP284	248	CG315	282	CI492	316	CJ481
	215	BP294	249	CG324	283	CI493	317	CJ493
	216	BP299	250	CG336	284	CI510	318	CJ501
	217	BP300	251	CG99	285	CI522	319	CJ514
	218	BP306	252	CH143	286	CI534	320	CJ539
15	219	BP311	253	CH207	287	CI542	321	CJ540
	220	BP312	254	CH224	288	CI560	322	CJ549
	221	BP327	255	CH227	289	CI561	323	CJ551
	222	BP345	256	CH245	290	CI583	324	CK126
	223	BP368	257	CH246	291	CI586	325	CK151
20	224	BP467	258	CH27	292	CJ145	326	CK181
	225	BP468	259	CH30	293	CJ149	327	CK201
	226	BR375	260	CH4	294	CJ160	328	CK213
	227	BR390	261	CH64	295	CJ164	329	CK218
	228	BR408	262	CH78	296	CJ168	330	CK234
25	229	BR418	263	CH85	297	CJ176	331	CK37
	230	BY66	264	CH87	298	CJ183	332	CK48
	231	CF118	265	CN320	299	CJ194	333	CL104
	232	CF127	266	CN343	300	CJ206	334	CL110
	233	CF22	267	CN344	301	CJ230	335	CL122
30	234	CF235	268	CN395	302	CJ237	336	CL132
	235	CG109	269	CN423	303	CJ257	337	CL147
	236	CG131	270	CI363	304	CJ265	338	CL152
	237	CG153	271	CI386	305	CJ378	339	CL181
	238	CG158	272	CI392	306	CJ389	340	CL182

	341	CL399	375	CN516	409	CO58	443	CO155
	342	CL469	376	CN532	410	CO48	444	CO153
	343	CL470	377	CN552	411	CO444	445	CO145
	344	CL481	378	CN593	412	CO431	446	CO140
5	345	CL493	379	CN619	413	CO391	447	CO139
	346	CM12	380	CN621	414	CO384	448	CO128
	347	CM178	381	CN667	415	CO36	449	CO1254
	348	CM188	382	CN703	416	CO351	450	CO1247
	349	CM194	383	CN718	417	CO337	451	CO1232
10	350	CM246	384	CN729	418	CO327	452	CO1224
	351	CM251	385	CN835	419	CO315	453	CO1223
	352	CM54	386	CN896	420	CO304	454	CO1206
	353	CM62	387	CO933	421	CO270	455	CO1198
	354	CN140	388	CO924	422	CO268	456	CO1196
15	355	CN171	389	CO908	423	CO264	457	CO1194
	356	CN173	390	CO900	424	CO261	458	CO1187
	357	CN238	391	CO889	425	CO257	459	CO1180
	358	CN29	392	CO888	426	CO253	460	CO1178
	359	CN291	393	CO874	427	CO25	461	CO1175
20	360	CN304	394	CO851	428	CO246	462	CO117
	361	CN327	395	CO83	429	CO244	463	CO1168
	362	CN49	396	CO821	430	CO240	464	CO1164
	363	CN50	397	CO806	431	CO228	465	CO1162
	364	CN54	398	CO798	432	CO223	466	CO1161
25	365	CN65	399	CO79	433	CO222	467	CO1159
	366	CJ305	400	CO71	434	CO209	468	CO1153
	367	CJ316	401	CO7	435	CO205	469	CO1151
	368	CJ317	402	CO69	436	CO204	470	CO1137
	369	CJ336	403	CO66	437	CO20	471	CO1123
30	370	CJ347	404	CO639	438	CO197	472	CO1076
	371	CJ360	405	CO638	439	CO185	473	CO1072
	372	CJ365	406	CO625	440	CO170	474	CO1026
	373	CJ366	407	CO62	441	CO17	475	CO1000
	374	CN483	408	CO602	442	CO163	476	CN755

	477	CN736	511	CR1166	545	CR632	579	CO409
	478	CN709	512	CR1186	546	CR641	580	CO474
	479	CO975	513	CR1190	547	CT729	581	CO480
	480	CO990	514	CR329	548	CN922	582	CO500
5	481	CP280	515	CR354	549	CN934	583	CO519
	482	CP283	516	CR377	550	CN951	584	CO522
	483	CP287	517	CR390	551	CN952	585	CO526
	484	CP289	518	CR392	552	CN980	586	CO559
	485	CP294	519	CR422	553	CP111	587	CO595
10	486	CP304	520	CR423	554	CP147	588	CO605
	487	CP307	521	CR466	555	CU13	589	CO618
	488	CP311	522	CR477	556	CP251	590	CO629
	489	CP313	523	CR478	557	CP258	591	CO643
	490	CP314	524	CR482	558	CP33	592	CO653
15	491	CP328	525	CR491	559	CP41	593	CO661
	492	CP352	526	CR494	560	CP91	594	CO667
	493	CQ286	527	CR502	561	CP92	595	CO695
	494	CQ294	528	CR506	562	CQ160	596	CO696
	495	CQ304	529	CR513	563	CQ165	597	CO707
20	496	CQ309	530	CR514	564	CQ268	598	CO716
	497	CQ331	531	CR515	565	CQ30	599	CO718
	498	CQ333	532	CR527	566	CR100	600	CO720
	499	CR1116	533	CR529	567	CR178	601	CO722
	500	CR1118	534	CR537	568	CR184	602	CO736
25	501	CR1121	535	CR538	569	CR263	603	CO763
	502	CR1127	536	CR540	570	CR335	604	CO767
	503	CR1135	537	CR541	571	CR4	605	CP116
	504	CR1141	538	CR545	572	CR61	606	CP151
	505	CR1142	539	CR587	573	CR93	607	CI293
30	506	CR1144	540	CR588	574	CO282	608	CI294
	507	CR1147	541	CR593	575	CO310	609	CI298
	508	CR1155	542	CR594	576	CO334	610	CU14
	509	CR1156	543	CR611	577	CO387	611	CU2
	510	CR1162	544	CR618	578	CO390	612	CU25

	613	CU32	647	CR678	681	CT748	715	CS520
	614	CU39	648	CR726	682	CT738	716	CS524
	615	CU40	649	CR733	683	CT726	717	CS534
	616	DA10	650	CR778	684	CT706	718	CT14
5	617	DA136	651	CR836	685	CT705	719	CT142
	618	DA155	652	CR839	686	CT702	720	CT143
	619	DA16	653	CR872	687	CT693	721	CT149
	620	DA165	654	CR890	688	CT677	722	CT156
	621	DA170	655	CR916	689	CT658	723	CT159
10	622	DA183	656	CR929	690	CT645	724	CT162
	623	DA223	657	CR930	691	CT636	725	CT188
	624	DA224	658	CR936	692	CT631	726	CT189
	625	DA225	659	CR974	693	CT616	727	CT190
	626	DA227	660	CT747	694	CT611	728	CT193
15	627	DA228	661	CT727	695	CT600	729	CT194
	628	DA234	662	CT690	696	CT585	730	CT2
	629	DA244	663	CT649	697	CT583	731	CT207
	630	DA246	664	CT624	698	CS224	732	CT220
	631	DA274	665	CT564	699	CS255	733	CT223
20	632	DA471	666	CT88	700	CS267	734	CT226
	633	DA490	667	CT864	701	CS271	735	CT227
	634	DA495	668	CT857	702	CS278	736	CT24
	635	DA496	669	CT852	703	CS284	737	CT254
	636	DA504	670	CT838	704	CS296	738	CT256
25	637	DA505	671	CT808	705	CS297	739	CT258
	638	DA507	672	CT807	706	CS317	740	CT271
	639	DA516	673	CT797	707	CS319	741	CT275
	640	DA529	674	CT791	708	CS322	742	CT28
	641	DA84	675	CT785	709	CS353	743	CT284
30	642	CR1003	676	CT783	710	CS366	744	CT293
	643	CR1013	677	CT780	711	CS471	745	CO1020
	644	CR1044	678	CT771	712	CS475	746	CO1043
	645	CR1056	679	CT754	713	CS485	747	CO1067
	646	CR1063	680	CT750	714	CS516	748	CO1069

	749	CO1080	783	DB257	817	CW1617	851	CT384
	750	CO1081	784	DB343	818	CW1632	852	CT392
	751	CO1094	785	DB415	819	CW1636	853	CT394
	752	CO956	786	DB53	820	CW1640	854	CT415
5	753	CO973	787	DB85	821	CW169	855	CT421
	754	CJ471	788	CW1000	822	CW172	856	CT423
	755	CJ472	789	CW1038	823	CW173	857	CT434
	756	CJ475	790	CW1087	824	CW175	858	CT440
	757	CJ483	791	CW1100	825	CV123	859	CT443
10	758	CJ484	792	CW1109	826	CV156	860	CT450
	759	CJ485	793	CW1112	827	CV160	861	CT453
	760	CJ486	794	CW1115	828	CV192	862	CT457
	761	CJ488	795	CW1150	829	CV203	863	CT466
	762	CJ496	796	CW1155	830	CV215	864	CT474
15	763	CJ497	797	CW1177	831	CV227	865	CT475
	764	CJ498	798	CW1195	832	CV263	866	CT479
	765	CJ507	799	CW1200	833	CV275	867	CT489
	766	CJ508	800	CW1201	834	CV305	868	CT51
	767	CJ519	801	CW1214	835	CV328	869	CT519
20	768	CJ520	802	CW1225	836	CV380	870	CT521
	769	CJ521	803	CW1230	837	CV394	871	CT526
	770	CJ522	804	CW1233	838	CV410	872	CT536
	771	CJ534	805	CW1272	839	CV416	873	CT541
	772	CJ536	806	CW1292	840	CV461	874	CT547
25	773	CJ543	807	CW1306	841	CV493	875	CT550
	774	CJ544	808	CW1311	842	CV501	876	CT559
	775	CJ547	809	CW1314	843	CT3	877	CT562
	776	CK53	810	CW1334	844	CT314	878	DE36
	777	CK7	811	CW1365	845	CT317	879	DE37
30	778	CK70	812	CW1372	846	CT320	880	DE4
	779	CL49	813	CW149	847	CT326	881	DE42
	780	CL63	814	CW152	848	CT340	882	DE63
	781	DB203	815	CW1574	849	CT353	883	DE70
	782	DB208	816	CW1611	850	CT358	884	DE83

	885	DE103	919	CS771	953	CW775	987	DA337
	886	DE105	920	CS773	954	CW795	988	DA348
	887	DE110	921	CS776	955	CW802	989	DA373
	888	DE114	922	CW222	956	CW823	990	DA388
5	889	DE117	923	CW224	957	CW835	991	DA389
	890	DE119	924	CW226	958	CZ115	992	DA390
	891	DE91	925	CW232	959	CZ122	993	DA391
	892	DE95	926	CW254	960	CZ186	994	DA414
	893	DE96	927	CW272	961	CZ214	995	DA428
10	894	CW420	928	CW280	962	CZ247	996	DA443
	895	CW424	929	CW313	963	CZ251	997	DA451
	896	CW457	930	CW314	964	CZ268	998	CW1458
	897	CW485	931	CW347	965	CZ270	999	CW1475
	898	CS383	932	CW354	966	CZ278	1000	CW1481
15	899	CS384	933	CW363	967	CZ291	1001	CW1506
	900	CS399	934	CW374	968	CZ320	1002	CW1510
	901	CS405	935	CW382	969	CZ326	1003	CW1543
	902	CS409	936	CW383	970	CZ362	1004	CW1550
	903	CS431	937	CW386	971	CW1414	1005	CW1552
20	904	CS438	938	CW388	972	CW1440	1006	CZ372
	905	CS454	939	CW512	973	CE209	1007	CZ374
	906	CS588	940	CW517	974	CE216	1008	CW902
	907	CS629	941	CW53	975	CE232	1009	CW922
	908	CS636	942	CW554	976	CE242	1010	CW924
25	909	CS637	943	CW585	977	CF193	1011	CW976
	910	CS638	944	CW618	978	CH776	1012	CW979
	911	CS645	945	CE197	979	CW1381	1013	CW984
	912	CS679	946	CW662	980	CW1389	1014	CW998
	913	CS682	947	CW675	981	CW1399	1015	CZ1
30	914	CS734	948	CW691	982	CZ653	1016	CW753
	915	CS743	949	CW707	983	CZ681	1017	CW759
	916	CS752	950	CW735	984	CZ711	1018	CW800
	917	CS756	951	CW762	985	CZ719	1019	CW891
	918	CS765	952	CW768	986	DA306	1020	CW960

	1021	CT80	1055	DC14	1089	DH1206	1123	DF478
	1022	DF1115	1056	CW1670	1090	DH1212	1124	DF483
	1023	DF1117	1057	CW1682	1091	DH1213	1125	DF494
	1024	DF1125	1058	DF814	1092	DH190	1126	DF499
5	1025	DF134	1059	DF821	1093	DI191	1127	DF7
	1026	DF14	1060	DF842	1094	DI207	1128	DF706
	1027	DF163	1061	DG1	1095	DI216	1129	DF713
	1028	DF174	1062	DG17	1096	DI243	1130	DF727
	1029	DF175	1063	DG174	1097	DI248	1131	DF737
10	1030	DF180	1064	DG256	1098	DI261	1132	DF756
	1031	DF185	1065	DG26	1099	DF1005	1133	DF757
	1032	DF201	1066	DG266	1100	DF1009	1134	DF762
	1033	DF202	1067	DG326	1101	DF1010	1135	DF776
	1034	DF203	1068	DG327	1102	DF102	1136	DF777
15	1035	DF206	1069	DG329	1103	DF1050	1137	DF780
	1036	DF219	1070	DG330	1104	DF1062	1138	DF783
	1037	DF230	1071	DG331	1105	DF1063	1139	DG12
	1038	DF232	1072	DG44	1106	DF1084	1140	DG121
	1039	DF239	1073	DG65	1107	DF153	1141	DG128
20	1040	DF244	1074	DG69	1108	DF218	1142	DG141
	1041	DF259	1075	DG7	1109	DF251	1143	DG149
	1042	DF266	1076	DG71	1110	DF280	1144	DH28
	1043	DF46	1077	DG76	1111	DF286	1145	DH303
	1044	DF65	1078	DG82	1112	DF316	1146	DH318
25	1045	DF69	1079	DH1086	1113	DF317	1147	DH322
	1046	DB145	1080	DH1098	1114	DF343	1148	DH340
	1047	DB150	1081	DH1135	1115	DF347	1149	DH371
	1048	DB159	1082	DH1145	1116	DF370	1150	DH40
	1049	DB174	1083	DH1153	1117	DF382	1151	DH401
30	1050	DB180	1084	DH1182	1118	DF396	1152	DH432
	1051	CY1	1085	DH1185	1119	DF428	1153	DH451
	1052	CY11	1086	DH1190	1120	DF453	1154	DH496
	1053	CY3	1087	DH1191	1121	DF457	1155	DH502
	1054	CY9	1088	DH1201	1122	DF460	1156	DH529

	1157	DH66	1191	DF915	1225	DH1357	1259	DI501
	1158	DF518	1192	DF948	1226	DH145	1260	DI504
	1159	DF521	1193	DF950	1227	DH999	1261	DK111
	1160	DF538	1194	DF956	1228	DI160	1262	DK113
5	1161	DF543	1195	DF966	1229	DI386	1263	DK120
	1162	DF545	1196	DF968	1230	DI391	1264	DK122
	1163	DF547	1197	DF971	1231	DI435	1265	DK126
	1164	DF568	1198	DF973	1232	DI448	1266	DK134
	1165	DF587	1199	DF979	1233	DI454	1267	DK136
10	1166	DF589	1200	DF984	1234	DJ109	1268	DK150
	1167	DF591	1201	DF989	1235	DJ146	1269	DK160
	1168	DF601	1202	DH1257	1236	DJ167	1270	DK170
	1169	DF606	1203	DH1308	1237	DF1065	1271	DK182
	1170	DF62	1204	DH1314	1238	DI387	1272	DK185
15	1171	DF620	1205	DI341	1239	DI393	1273	DK197
	1172	DF625	1206	DH1265	1240	DI403	1274	DK206
	1173	DF648	1207	DI349	1241	DI430	1275	DK219
	1174	DF657	1208	DI355	1242	DI438	1276	DK223
	1175	DF659	1209	DI362	1243	DJ2	1277	DK227
20	1176	DF661	1210	DI366	1244	DJ188	1278	DK229
	1177	DF662	1211	DI508	1245	DJ238	1279	DK230
	1178	DF670	1212	DI516	1246	DJ259	1280	DK243
	1179	DF674	1213	DI518	1247	DK64	1281	DK264
	1180	DF682	1214	DF1066	1248	DK70	1282	DK268
25	1181	DF688	1215	DF1069	1249	DK81	1283	DK31
	1182	DF810	1216	DG279	1250	DK84	1284	DK39
	1183	DF823	1217	DH1010	1251	DI462	1285	DK93
	1184	DF835	1218	DH1013	1252	DI466	1286	DL101
	1185	DF860	1219	DH1044	1253	DI474	1287	DL110
30	1186	DF877	1220	DH1045	1254	DI475	1288	DL116
	1187	DF883	1221	DH1073	1255	DI479	1289	DL132
	1188	DF895	1222	DH1078	1256	DI480	1290	DL63
	1189	DF909	1223	DH1340	1257	DI482	1291	DL82
	1190	DF910	1224	DH1349	1258	DI500	1292	DL95

	1293	DL99	1327	DL491	1361	DL547	1395	DO181
	1294	DJ332	1328	DL495	1362	DL550	1396	DO419
	1295	DJ362	1329	DL498	1363	DL551	1397	DO424
	1296	DK290	1330	DL504	1364	DL601	1398	DO440
5	1297	DK321	1331	DM118	1365	DL604	1399	DO447
	1298	DK324	1332	DM122	1366	DL605	1400	DO568
	1299	DK329	1333	DM126	1367	DL607	1401	DO575
	1300	DK357	1334	DM128	1368	DL608	1402	DO589
	1301	DK360	1335	DM130	1369	DL616	1403	DO610
10	1302	DL141	1336	DM147	1370	DL619	1404	DO715
	1303	DL146	1337	DM169	1371	DL620	1405	DO722
	1304	DL162	1338	DM26	1372	DL634	1406	DO737
	1305	DL163	1339	DM404	1373	DM194	1407	DO742
	1306	DL169	1340	DM406	1374	DM197	1408	DO755
15	1307	DL181	1341	DM407	1375	DM221	1409	DO765
	1308	DL185	1342	DM420	1376	DM248	1410	DO797
	1309	DL218	1343	DM425	1377	DM250	1411	DO836
	1310	DL220	1344	DM435	1378	DM262	1412	DO884
	1311	DL248	1345	DM445	1379	DM265	1413	DO896
20	1312	DL289	1346	DM449	1380	DM272	1414	CZ549
	1313	DL290	1347	DM459	1381	DM278	1415	CZ598
	1314	DL291	1348	DM462	1382	DM293	1416	DT431
	1315	DL316	1349	DM469	1383	DM303	1417	DT443
	1316	DL320	1350	DM482	1384	DM340	1418	DT446
25	1317	DL321	1351	DM6	1385	DM360	1419	DT449
	1318	DL425	1352	DM94	1386	DM365	1420	DT450
	1319	DL426	1353	DJ279	1387	DM522	1421	DT455
	1320	DL427	1354	DJ284	1388	DM533	1422	DT458
	1321	DL439	1355	DJ299	1389	DM542	1423	DN106
30	1322	DL440	1356	DJ319	1390	DM87	1424	DN153
	1323	DL444	1357	DJ323	1391	DN124	1425	DN176
	1324	DL457	1358	DL531	1392	DN144	1426	DT530
	1325	DL463	1359	DL535	1393	DN147	1427	DT534
	1326	DL466	1360	DL543	1394	DN167	1428	DT535

	1429	DT544	1463	DW1	1497	BK5
	1430	DT563	1464	DW389	1498	BK504
	1431	DT584	1465	DW398	1499	BK513
	1432	DT590	1466	DW654	1500	BK517
5	1433	DT596	1467	DW659		
	1434	DT597	1468	DW665		
	1435	DT598	1469	DW694		
	1436	DT640	1470	DW705		
	1437	DT655	1471	DW716		
10	1438	DT674	1472	DW749		
	1439	DT719	1473	DW761		
	1440	DT734	1474	DW765		
	1441	DT779	1475	DW771		
	1442	DT801	1476	DW78		
15	1443	DT802	1477	DW780		
	1444	DN696	1478	BK10		
	1445	DN697	1479	BK11		
	1446	DN704	1480	BK2		
	1447	DN710	1481	BK368		
20	1448	DN711	1482	BK373		
	1449	DN714	1483	BK374		
	1450	DN721	1484	BK375		
	1451	DN722	1485	BK384		
	1452	DN732	1486	BK402		
25	1453	DN740	1487	BK410		
	1454	DN746	1488	BK415		
	1455	DN747	1489	BK425		
	1456	DN753	1490	BK427		
	1457	DN756	1491	BK436		
30	1458	DN764	1492	BK445		
	1459	DN770	1493	BK455		
	1460	DN772	1494	BK458		
	1461	DN1120	1495	BK494		
	1462	DU372	1496	BK498		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

5 The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

10 [†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

15 *T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

20 Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

25 Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The ~~isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably
35 linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which
5 will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently
10 purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or
15 all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic
20 animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are
25 known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological
30 processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected
 5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured
 10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-
 15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa
 20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching
 25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al.
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

Other Activities

30 A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,
10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,
20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a
25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either
30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

(1) GENERAL INFORMATION:

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- (iii) NUMBER OF SEQUENCES: 1500
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- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
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(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

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GAATTCGGCC TTCATGGCCT AAGTGTTTAA ATTATAAGCT GGTGAAGTA AATAACACAA      60
ATCAAGCTCA CCAATTTTAA TACTCAGCTG TTGATAAACA AACTGAAGA GTGACATTTA      120
AATTTGAATT ATCTTCTTTG AAGTAGCATT GCAGCACTTT TGAATGACTT CAAAAGGCT      180
GATCATAAAA ATCACTTCAA TCATTTTCAA ATTTTACTTT AGCAGCAATG AAGTTATTTG      240

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GTATGACTCA GATGAACCTT CTGCTCTGTC TTGGAGTTAT TATGGTCATT TCATTTTCTG 300
CAACCTGGGA AAACCTCGAG 320

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTCGGCC TTCATGGCCT ACGAGTGGAT CTGGTTGAGA GGAAAGCAGC TAAAAATACA 60
GGAGATGAAA GGGATCATAA CGAACATAAT GAACCATGTT CATTATGGTT CGTGGGGAGG 120
CAGGAAAGCA CAGTATCCAG GGCATAGGCA GAAGAGCTGT CTTTCACGGG AGGAGGGGAA 180
CATATTCTAC TGCAATAAGC AAGGGCGGGG TAAGTACGGA TCGGGTACTT TGGGAACTAT 240
GACGGTAGGG AGTTCAGGAA GTTGCTGCCT GAAGGCATAA AGGTTTTTTT TTTTTTTTTT 300
TTTTTTTGCC AATTGGTCCA GTACCCTCCT TCTGTGGCCC CCATCTCCAG TCTCGAG 357

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCCTTA TATAATTTGG ATACCTACTC ATTGTCAGTT GTATGCTTGG CAAATATCTT 60
TCCTGACCCT TACTTACCTT TTCACTCTTA ATGGTATCTT TGATGAATCA AAAATTTTTC 120
TTTTTTTGTT GTTTTTGAG ACAGAGTCTT AACTCTGTCA CCCAGGCTGG AGTGCAGTGC 180
ATGAACATGG CTCACTGCAG CCTCAACTTC TTGGACTCAA GCAATCCTCC TGCCCTCAGAA 240
CCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAGCTCCTT TCCTTCTACT CTCCTGCTCA 60
GACCATTAGT AGGTACTTTG TTAAATAAAA AACTAGATTA ACATCAATAT TACTCCAATT 120
TGGTATCTTT TACACTATGT ATTATACCTA CTTTCTTTT ATTTCATTTA CAAATAGTTT 180
AAATTACTTT ATCAACCAGC TGTATTGTTT CCCTCTTGTA AAAGTACCAT CAAGTGGGGA 240
AAATGTATGT GGCAGTCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```

GAATTCGGCC TTCATGGCCT AATAACTTAC CCAGTCACGA ATATTTCTTC ATAGCAGCAT      60
CAGAGTGGAC TAATACGATT ATAATTATCA TCACCTTTTG ACTGACCAAT TGATTACAG      120
TATTGAGTTC AATCTGTTTT TTTAAAAAAT ATCTTCTAAA TATCAGGTGC TGTATTAGAT      180
GTGGGTACA AAAATGTATT TTCATTTACT CACTAATTTA CTTAAAATT ATTTATTGAG      240
GTACCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```

GAATTCGGCC TTCATGGCCT AGGTGCTGGA AGTAAGCTGT GTGAACAAAT GAGACGATTC      60
CCCTTTCTAA TGAGTTTATA TGCAATGTGG TATCTTTACC GATACATGCT CTGTCAGAAA      120
GAAGCAGCCC ACTTCTGTCC AATAGCCAAT CCGGCTTCAG GAGCAGCAGG AGAGGCTTCG      180
GGAACGGGAG AAGAGGCTTC AGCAGCTGGC CGAGCCACAG AGCGACTTGG AGGAGCTGCA      240
CGAGAACAAG AGCGCACTGC AGTTGGAGAG CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```

GAATTCGGCC TTCATGGCCT ACTCATCCA AAATAAAAAA AAAAAATTC CATGATCTTA      60
TCTAGCTTCT CTAGCAGTAC TTGTAIGATT TCACCTTTCT TTCTTTATTC TTTTCTTCCA      120
TATTTTTTTT TTTTGAGACA GGGTCTCACT CTATTGTCCA GGCTAGAGTG CAGTAGTTTG      180
ATCATGACTC ACTCTAACCT GGACCTCCGG GGCCTAAGTA ATCTTCCCAC CTCAGCCTCT      240
CAAGTAGCTG GGACTACAGG GATGTACCAC CATGCCTGGC TAAG                                         284

```

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GTTGAATTCT	AGACCTGCCT	CGAGGACGCC	AGGGAAGTGA	GTTGAAAATC	TGAAAATGCG	60
GCCATGGACT	GGTCCTGGC	GTTGGATTAT	GCTCATTCTT	TTGCCTGGG	GGACCTTGCT	120
GTTTATATA	GGTGGTCACT	TGGTACGAGA	TAATGACCAT	CCTGATCACT	CTAGCCGAGA	180
ACTGTCCAAG	ATTCTGGCAA	AGCTTGAACG	CTTAAACAG	CAGAATGAAG	ACTTGAGGCG	240
AATGGCCGAA	TCTCTCCGA	TACCAGAAGG	CCCTATTGAT	CAGGGGCCAG	CTATAGGAAG	300
AGTGCGCGTT	TTAGAAGAGC	AGCTTGTTAA	GGCCAAAGAA	CAGATTGAAA	ATTACAAGAA	360
ACAGACCAGA	AATGGTCTGG	GGAAGGATCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GCTGTGATGA	AAATGCTTTA	TGCTCAACA	CTGTTGGAGG	ACACAAGTGT	GTTTGCAAGC	60
CGGGCTATAC	AGGGAATGGA	ACGACATGCA	AAGCATTITG	CAAAGATGGC	TGTAGGAATG	120
GAGGAGCCTG	TATTGCCGCT	AATGTGTGTG	CCTGCCACCA	AGGCTTCACT	GGACCCAGCT	180
GTGAAACGGA	CATTGATGAA	TGCTCTGATG	GTTTGTGTTCA	ATGTGACAGT	CGTGCTAATT	240
GCATTAACCT	GCCTGGATGG	TACCACTGTG	AGTGCAGAGA	TGCTACCAT	GACAATGGGA	300
TGTTTTCAAC	AAGTGGAGAA	TCGTGTGAAG	ATATTGATGA	GTGTGGGACC	ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

GAATTCGGCC	TTATGGCCT	ATTTCCGATC	TATGTATCTG	TACTCATACA	GCCTCATCGG	60
GCTAAACAGC	CTTCTTTTCA	GAACAGTAGA	TCACTCAACT	GGGTTTTCAA	GTGACTGTTT	120
ACCTTTCAAG	GCTGGCTTTA	TAGTCTTTCG	CTCACTGTAT	CCAGCAATCC	AAACTTTACC	180
CTATCCAGT	CAGGACTGCA	CACCTCATAT	TGAAAGACAT	ACCTTAGAAC	CAGACTCCCC	240
AAACCTTACA	AATATCCAC	CCTTGACTCC	CGTTCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

GAATTCTAGA CCTGCCTCGA GCGCCACACA GTGACTGCCG GGTAAAGTTG TGGAAATTACG      60
TCCCTGGACT CACCCCCTGC CTTCTCGCC GAGTCCTGGC CATAAAGGGC CGCGCCACCA      120
CCCTGCCCTG ACCCTCCCCA ACTCTCCCTG TCTCTCTTT CATTCTTCCC CTCTTTCCTT      180
TTCCCTCTCT TTCCCCACTT CGATATGAGC TGCTTCTTAA CGGTATGAGA TTATTTNACT      240
CCTTCTTCTT CCTTTCCTT CTTGTCCTGC CTGGCCTAGA GAGGTGCCCT GCCTGTCCCT      300
CCTGCACCCA CCGTCCTTTT CCAAGCATGA ACAGTGGGAC AGGCCCCAGG AGATGGGTGC      360
CAGGGAGCAG AAGGGGGAGC CTTCAGGCCT GGACAAAACG AAACACCCCC CCAAAAAAAG      420
NAAACCCACG ACTCGAG                                         437

```

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GTTTCTTCTA AGTAGATCTT CTTCCCCAT TAACTAGGT TTTCTACTGC AAGATATTTT      60
GTGCATTGCT GTTTTAAACC CTTTAAACAG CGAATCATAG CAGTCTAAGA AGTCTTCTGA      120
ACCATCCTGG ACTCTTGGTG TGATTTTAAA TTGTGTCTAC AAGTTCTCTG ACATTCTTCC      180
CACCAAGAGG TAGAGTCTGT TTCCCCTCCC TTTGAACCTA GGTAGGCCTT TGTACTGCC      240
TTGATGAATA CAATGAGACT CGAG                                         264

```

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GATTTTITAC CCAAAGCTCT GGAATTGTAC ATTTATTTT TAAACTCAA AGAGGGAAAG      60
AGCCTTGAT CATATGTGAA CATTGTATCA TAGGTAATGT TGTACAGACC CTTTATACA      120
GTGATCTGTC TTGTTCTGTC AGCAAAAATC CTCTATGGAC ATAGGAGGTG CTGTGTCCA      180
TGCCCTCTTG CCCTGACAGT GTCCCATGGG CCCCCTTCTG CTCCCTGCCC CCTCCCTGCT      240
ACTGCTGATG CACTCCCCCC CCTCGAG                                         267

```

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GAATTCGGCC	TTCATGGCCT	ATTTTTTATT	TGTTTGTGTT	TGTTTGTGTT	GGATGGGGTT	60
TGCGCGTGT	GCCCAGGCTG	GTTTCGAATT	TTTGGGCTTA	TGCAATCCAC	CCACCTTGGC	120
CTCCCAAAGT	GCAGGGATTA	CAGGCATGAG	CCATCTTGCT	GGGCCACCTT	TTCTTCTCT	180
TTTAACAAAT	TCAGCAATTT	TTCAGTCCCA	GAAATCTGTA	AATACATTTT	TTGTGGAAAA	240
ATACAATGGG	AATGGCATCA	AAAGATGGTT	TCTATTAGGA	ATGGGAACAG	GTAACAGTTT	300
TCCTGCCAC	CTCAACAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GGGCTGGCAG	GCGGGCCAAA	GGTAATGAAG	CAAAGAGAGA	GGGAAAAGAC	GTGTGAAAAT	60
TGCAGAGGGG	GTGACCGAGG	GAAACACGTG	AGCGTGATAA	TGACAGAAAA	ACCACGGAAG	120
GAGCAAACCT	GGGCAGGGGG	TGGGAAACCC	GGGCCGTTTC	CAGGGAGCAC	AGCAGACTCT	180
AGAGGTAACA	CTCAAAAGCA	ACAACAGAAG	CAAGGAGGAA	GTGGGAAAAT	ATTTTTTAATG	240
TGCTACAACG	AAACAGCTGC	CTGAATTCTA	TATACCCCTCT	GAAAATAATC	TGCACATAAA	300
ATGGGAAAGC	TTACCCGCAG	CAGACCCAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTCGGCC	TTCATGGCCT	ATGCTTCTTC	CACGCACCAC	CACCACCACC	ACCACCATCA	60
TGGCCATAGC	CACGGTGGCC	TGGGGGTGCT	GCCTGATGGG	CAGTCCAAGC	TCCAGGCCCT	120
GCATGCCCAG	TATTGCCAAG	GACCGGGCCC	TGCCCCGCCA	CCCTACCTCC	CACCCAGCA	180
GCCCTCTCTT	CCCCACCTC	CCCAGCAGCC	CCCACCCTTG	CCCCACCTGG	GCTCCATTCC	240
ACCGCCTCCC	GCCTCAGCCC	CACCTGTGGG	GCCACATCGC	CACTTCCAGC	CCCATGGCCC	300
AGTCCCAGGG	CCCCAACACT	ATACCTTGGG	CCGGCCAGGC	AGGGCACCCA	GACGGGGGGC	360
TGGAGGACAC	CCTCAGTTTG	CTCCACATGG	CCGCCACCCC	CTGCACCAGC	CCACATCCCC	420
ACTGCCCTTG	TACAGTCCTG	CCCCCAGCA	CCCTCCAGCC	CACAAACAGG	GCCCTAAGCA	480
CTTCATCTTC	AGCCACCACC	CATCTCGAG				509

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AAAGATGGCG GAGAACAGCG GTCGCGCCGG CAAGAGCAGC      60
GGGAGCGGCG CGGGGAAGGG GCGGTGTCC GCAGAGCAGG TGATTGCTGG CTTCAACCGC      120
CTTCGGCAGG AACAGCGAGG CCTGGCATCC AAAGCAGCTG AGTTGGAGAT GGAGTTGAAT      180
GAGCACAGCC TAGTGATCGA TACACTGAAG GAGGTAGATG AAACCTGTAA GTGCTACCGC      240
ATGGTTGGAG GAGTGCTGGT GGAGCGAACT GTCAAAGAGG TGCTGCCCCG TTTGGAGAAC      300
AACAAAGGAGC AGATACAGAA GATCATTGAG ACACTGACAC AAGCAACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTCGGCC AAAGAGGCCT AGCTAGGTTT TGAAGCTTCT GAGTTCTGCA GCCTCACCTC      60
TGAGAAAACC TCTTTGCCAC CAATACCATG AAGCTCTGCG TGACTGTCCT GTCTCTCCTC      120
GTGCTAGTAG CTGCCTTCTG CTCTCTAGCA CTCTCAGCAC CAATGGGCTC AGTCCCCCCC      180
CCCGTACAGC CCTCGAGGCA GGTCTGAG

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GAATTCGGCC TTCATGGCCT AGGCGGGACT AACACAGGGT TGTCATCTTT TCCTTTTGCC      60
AAGAAAGAAC ATTAAAATGT ACTACCAGCA TCTGCCATCA CTAGCATTTC ATAAAAAGAG      120
GTTCTGTTAG CAACAGAGTA GAACTGTAG GAAAGCATCT CAGAACAAAA CTAAGTTGAA      180
TAAATTCACC TAATAAAAAT GCCTTGGTCT AGGATTCCTT TTCTTCATCA AAAGCTGCAA      240
GAGAAAGCCA CTGCTTACCT GATGCCGATT TACTGGTCAT TGGGGTGGGC AGGTTTGGTT      300
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

GGTCTCACTT GTCTCATCCT GTCGCCCAGG CTGGAATGCA GTGGTATGAT CTCAGCTCAC      60
TGCAACCTCA GCCTCCTGGG TTCAAGTGAT TATCCTGCCT CAGCCTCCAA GTANCTGGGA      120
CTATAAGCAC ACATCACCAC ACCCAGCCAA TTTTGTGAA TTTTAAATAG GGTTTCACTA      180
TGTTGGCCAG GCTGGTTGAA CTCCTATCCT CAAGCGATCC ACCCACCTCG GCCTCCCGAA      240

```

GTGCTGGGAT TACCTGAGCC ACCGTGCCCA GCCCATTTCA CAGTACTTTT TATTTAACCC	300
TATCGTGCTA GGGCACCATG CAATATACAG CTATTTTCATT TTCCTTTTGT CTCTGTTTCT	360
TAGGTGGTCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC	60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT	120
GTCCCTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC	180
CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GGTAGAGATA ACAAACAGG ATACCAAAGT TGAGCTGGAG ACTTACAAGC AAATCGGCA	60
AGGTCTGGAT GAAATGTACA GTGATGTGTG GAAGCAGCTA AAAGAGGAGA AGAAAGTCCG	120
GTGGAACTG GAAAAAGAAC TGGAGTTACA AATTGGAATG AAAACCGAAA TGGAAATTGC	180
AATGAAGTTA CTGGAAGG ACACCCACGA GAAGCAGGAC ACACTAGTTG CCCTCCGCCA	240
GCAGCTGGAA GAAGTCAAAG CGATTAATTT ACAGATGTTT CACAAAGCTC AGAATGCAGA	300
GAGCAGTTG CAGCAGAAGA ATGAAGCCAT CACGCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTCGGCC AAAGAGGCCT AGATTTTAAA TTTGTTTGAT ACCTGCTGTG TATTCCTTGC	60
ATACCCAGCA CATTGTTGCC CATATTGTTG ACATGTAGTA TGTATTATT ACAATTATAT	120
GATTAATGAA ATGTATCTTA TTTTTCAT GTATAGCATG TACAGTCACA CTCGAG	176

(2) INFORMATION FOR SEQ ID NO:24:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 414 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

GAATTCGGCC AAAGAGGCCT ATTCTTTGTC TTTTGCACAT GTTCTTTGAG TCTTAGTATC	60
TGTAACGTGG CGCTACTCTC TCTATCATGG GGGGGCATGT TTTGACATTA AATGACTTT	120
TAAGAAAAAC ATGTCACTAA CCTGAAGCTC AGCCACACAG TGACTTTTAA GGTTTTATTT	180
AGACTTTACT GTTGTCTCA TGAGAGTAGG TACAGACTGC ATAAGGTTTA GAATCCCAGC	240
ATATGTCTGA AACGACGGGA CTTTCACTGT GATTTCCACC AGAGAAATTA TAGCAGAGTG	300
GCTGAGCATG TGCTCTGAGG CCAGGCCCCA GCTCTGCTGC TGACGAGCTG TGTGGTCTTG	360
GGCAGAGTGG TCTCCGAGTT CCAGTCCCTC CTCTGTAAAA TGGGCTTACT CGAG	414

(2) INFORMATION FOR SEQ ID NO:25:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

GAATTCGGCC AAAGAGGCCT AAACATATAC CTAGTCTATA CTCTCTCTTA TCTCTGAACA	60
CTTTTCATCT GGAGCTATTA ATGCCCTCTA GCCTTTATTA TAATTATCAC ATATAATTAT	120
GCCTTTTCTC CTCAAAATTA TCTGTTGGAG TCATCTTATA GTAGAGTCTT TACAGAACAC	180
AAAGCATTCA ATCACTTTAT TTCAGACACC AACCTTGTTT TTGATGAACA TATGTTAGTC	240
TTAAGCCATC TAAAGTAATG CTAATGTGGG ATCTTATGGA AGACTACTGG TAATACAGGA	300
AAAAAAGTGG CAAAGAAATC TGACACGTTT GGCAATTAT CTTGAGGCTC TGACCTCTCA	360
ATTGTTGAGT GTTGGAGGTC ACAGTAAACA AACCATATAA AGATCATGTT GAAAGTCAAC	420
ATTATTAATA TACCATACTT GAAGGATATG TGGTTATTGT CTCACGTGTC CATGTGAAGA	480
GACCACCGTC CCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 111 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC AAAGAGGCCT AGTTTTTGAT GAATTGTGT TATTTACTTA TAACTAGAGT	60
TTGAATGTTT ATTGGGAAAA CTTAATCATG ATCATCTACT GGTGGCTCGA G	111

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC	AAAGAGGCCT	ATGCAATTCT	GACCAGGAAG	CTCCTCTTTA	ATTGGAAATT	60
CTTAGAAAGG	TATGGAGCAA	AGGAGATCCC	AGCAAACATT	CCGGCATCTA	CTGCTCTTGG	120
GTTTTTCTG	TGTTGGTTTT	TTTTGTTTGG	TTTTGTTTAT	GAGATGGAGT	CTCACTCTGT	180
CGCCCAGGCT	GGAGTGCAGT	GGCGCAATCT	CAGCTCACTG	CAATCTCCAC	CTCCAGAGTT	240
CAAGTGAATA	TCCTGCCTCA	GCCTCTCAAA	CAGCTGGAAT	TACAGGTATA	CACCACCACA	300
CCGAGCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 597 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC	AAAGAGGCCT	AAGTGCAGTG	GTGCGATTAT	AGC1CACTGT	AGCCTCAGAA	60
TCCTGGGCTC	AAGCTGTCCT	CCCACTTAGC	CTCCCAAAGT	GCTGGGACTA	CAGGCGTGTG	120
CCACGGGGCC	CAGCCATTTT	TTCGAATATT	TTCAATCTGC	AGTTGTTTGA	ATCCACAGAT	180
GCAGAACCCA	TTTCTAATGG	AGGGCTGACT	ATACCTTTCT	GATGACCTAA	ATATTGTGTG	240
CCACTATTGG	GACACTCCTT	TCTTAGTGTC	AAGGTTTGTG	AGAAATTGAG	GGCTGTTTGA	300
TGGGCAAAGA	TTTATTTATT	TATTTACTGG	CTTATCTACA	ATTGAGACAG	GGTCTCACTA	360
TGTTTCTCAG	GCTAGTTCTA	ACTCCTGGGC	TGAAGCAGTC	CTCCCATCTC	AGCCTCCCAG	420
AGTGCTGGGA	TTACAGGTGT	GACACACCAT	ACCCGGCAGA	GCAAAGAGTT	AAGAGTACAA	480
GACATTTGAT	CATCTTGAGG	AGTATTTACT	TCAGACTGAA	ACACCACATG	AAATTC TAGA	540
GTCCAACAGA	AAGTGAATA	ATTTTTTGCT	TTTCCCTTCT	TCCGCTACAT	CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCGGCC	AAAGAGGCCT	AATTC TAGAC	ATGCTCAGCT	TTGTGGATAC	CGGGACTTTG	60
TTGCTGCTTG	CAGTAACCTT	ATGCCTAGCA	ACATGCCAAT	CTTTACAAGA	GGAAACTGTA	120
AGAAAGGGCC	CAGCCGGAGA	TAGAGGACCA	CGTGGAGAAA	GGGGTCCACC	AGGCCCCCCA	180
GGCAGAGATG	GTGAAGATGG	TCCACACAGG	CCTCCTGGTC	CACCTGGTCC	TCCTGGCCCC	240
CTGGTCTCGG	TGGGAACTTT	GCTGCTCAGT	ATGATGGAAA	AGGAGTTGGA	CTTGGCCCTG	300
GACCAATGGG	CTTAATGGGA	CCTAGAGGCC	CACCTGGTGC	AGCTGGAGCC	CCAGGCCCTC	360
AAGGTTTCCA	AGGACCTGCT	GGTGAGCCTG	GTGAACCTGG	TCAAACCTGG	CCTGCAGGTG	420
GTGCTGGTCC	AGCTGGCCCT	CCTGGCAAGG	CTGGTGAAGA	TGGTCACCC	GGAAAACCCG	480
GACGACCTGG	TGAGAGAGGC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC AAAGAGGCCT AGTCTGTGGT CATTTTCAAC TCTCATTTAT AGGATTCTAA      60
AAGGGCACTA CATTACTCCA CTCCCTTATC TAAAATAAAT TTAAAATTCA TCGGAATTTG      120
TCCAGTCCTC CATCACTGGA AAATGTACAG ATTCTTCTC TGGAAATATC TAAAGAAAAG      180
TACAGCTAAT GTTCCCCCAT TTCGTGTGT TTTGTTGCTG CTTTAACTAT GAATCATCT      240
GGCCGGGCGC AGTGACCAAG CCGCCGGGAG CTGGGGAGAG ACGCACCGGG GCGGCGACTG      300
GGCCAGGAGA CCAGAACACT CGAG                                     324

```

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC AAAGAGGCCT AGGAGCAGAT TCCTCATGGT GCTTGTTTAT TATATATATT      60
TAATCCTGCT TGACACTTTA CCAAGGGAG ATGGTCCCTT TTATCAGTTG AATGTTAGCA      120
GCGTTATTTC AGAGTGTGGT GACTGGTTAG AGAACTCAT GTACTCAACC AGCCACAGTT      180
TCAAACAAA TTTTATGTG CAAAGGACAG CAACCTTCTT GTATGTAAAC CCACCACTAC      240
TCGAG                                     245

```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```

GAATTCGGCC AAAGAGGCCT AGGTGCTTTG GTTTTGTCTT TTTTAGTCAT CCCCATGAGA      60
ATAATAAACT CCATGAGGCG AGCAACTTGG CTGGCCTGTG TGCCAGTGCT GGGGACATCA      120
CTGAGAAATG AAGGCCCAT TGGCAGGCTA TTTTGTAGCA AGATTCCTGA GGCCCAATCG      180
TTGGGTGATG AGATGGACCC GAGGTATTTT ACTCCAGCTC TCGAG                                     225

```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GCCAAAGAGG	CCTAGAGAGC	TCTGGGGGGC	AACCTGGAGG	TCTGAAAAGA	GGAGCCAGAG	60
AAGGTGGTAC	CAGGCTTCCT	GGTCAGAACC	GGCCTGGAGC	TCCTTCCCTT	CCCCCTGGCC	120
TGAGAGGTTG	CTTTTAAGTC	TTCCACCCCT	TGTTCCATCT	GCCTGCCAAC	CCATCGGAAA	180
GGAATCCACA	TCATATTGGA	GATGACCCCA	TCAACCCAG	GGCTCCAGCA	CTACCAAGTT	240
GGAATTCCAC	GCCCCGGAGT	GGGCTAGAGG	AAGACGAGAC	AGGACGAGGC	AGAAAAGCAC	300
ATTTTAAAAA	CCAGACAAGA	TGGCTAGGCC	ATCACCAACC	AACGGACTTA	CCTTACATTT	360
TGTAGGTAA	TTCCCCCAA	ATCTTGATTT	TTTTTTCCT	CAATTATCCT	TTAAAAATA	420
AGAAAACACA	TTCCAAACCC	ACTCGAG				447

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 402 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

GCGATTGAAT	TCTAGACCAT	GCCTGCTCTG	GGCCCAGCTC	TTCTCCAGGC	TCTCTGGGCC	60
GGGTGGGTCC	TCACCCTCCA	CCCCCTTCCA	CCAAGTGCAT	TCACTCCCAA	TGGCAGGTAT	120
CTGCAGCACC	TGGCAAGGGA	CCCCACCTCA	GGCACCTCT	ACCTGGGGGC	TACCAACTTC	180
CTGTTCCAGC	TGAGCCCTGG	GCTGCAGCTG	GAGGCCACAG	TGTCCACCGG	CCCTGTGCTA	240
GACAGCAGGG	ACTGCCTGCC	ACCTGTGATG	CCTGATGAGT	GCCCCCAGGC	CCAGCCTACC	300
AACAACCCGA	ATCAGCTGCT	CCTGGTGAGC	CCAGGGGCC	TGGTGGTATG	CGGGAGCGTG	360
CACCAGGGGG	TCTGTGAACA	GCGGCGCCTG	GGGCAGCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

GAATTCGGCC	AAAGAGGCCT	AGTGAAGAT	TTGGGTACTG	TCTTTAATAA	ATCAATCAAT	60
CGACTCTTAT	TTCAAGGAGA	AAGTTCTATG	TTATATGTTG	AAGGTGAACA	GATCATATTT	120
AGAGGATATA	ACAATTAGAA	ATCTAGAAAA	TAATTATCAC	TTTTATAAAA	TTTTTAGTCA	180
ACTGTACAAA	TAATTACATA	AAACATCAAT	TAATTATGCT	TAAAAATCAC	TAATGTTTAT	240
AATATATAAT	CACTATTGTG	AATCAAAAGT	TTAATTTTAT	GCCAAAAAAT	AAAAAATGCT	300
TACTCGA						307

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GAATTCGGCC	AAAGAGGCCT	ACTTCCATAA	CCGTGCTTTT	GACGTAAAAA	ATTTTAAATT	60
CAGCCTTTTG	GAGAACACTA	AGTATCTTAG	TGTGTTTTTA	CTTACTATAA	TAATATTATT	120
GACCTAGTGT	AATATTACTG	CCATATGGAC	CTCAAGGGTA	CTTTTCTGAT	AAATTTCTGT	180
TATGGTTTCA	TAATTAAACA	AAAGGATAAT	ATACAGAGTT	GTGGAGTTT	TTTGGTTTGT	240
TTTTGTTTTG	AGATAGCCTG	GGCAACGAGT	GAAACTCTGT	CACACACACA	CACACACACA	300
CACAGACACA	CACCAAATCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 426 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GAATTCGGCT	TCATGGCCTA	CAAGAAGATG	AAGAAGATTG	TGGATGCCCT	GATCAAGTAC	60
AAGGACAGCA	GTGGACGTCA	GCTCAGCGAG	GTCTTCATCC	AGCTGCCCTC	GCGAAAGGAG	120
CTGCCCGAGT	ACTACGAGCT	CATCCGCAAG	CCCGTGGACT	TCAAGAAGAT	AAAGGAGCGC	180
ATTCGCAACC	ACAAGTACCG	CAGCCTCAAC	GACCTAGAGA	AGGACGTCAT	GCTCCTGTGC	240
CAGAACGCAC	AGACCTTCAA	CCTGGAGGGC	TCCCTGATCT	ATGAAGACTC	CATCGTCTTG	300
CAGTCGGTCT	TCACCAGCGT	GCGGCAGAAA	ATCGAGAAGG	AGGATGACAG	TGAAGGCGAG	360
GAGAGTGAGG	AGGAGGAAGA	GGGCGAGGAG	GAAGGCTCCG	AATCCGAATC	TCGGTCCAGT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 482 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTCGGCC	TTTATGGCCA	ACACATAATC	CACGCTCATC	TTGCAAAGCG	CTATTTTCAGG	60
CACATCATTG	GAATACAGGA	AGTAGCCCTG	CACCTGCCAG	TGAGCTCGCC	ATTCACTGAT	120
TGGAAGAGTG	ACCTGGCATC	TTGGAAATCA	TTGTGTGTCT	TCAGGAGAAT	GTGCAGTGTC	180
TTGTAACAAC	TAATTATAAT	GCAAATTAGG	GCTACATTGT	AATCTGCTTT	GTTAATGAAA	240
ATGATAAAAC	AGAATATTGA	CAAGCTAGGA	CACCTGTGGT	ATCTTTAATT	GTATCTCCTT	300
CAGAAGTTTG	CTTCTTATGG	TATAATAAAG	TATGGAAGAA	TATTGAGTAT	ATGTTTACTC	360
TGGGCCTGGG	AGAACTTAAC	TTTCTAGAGC	AGTTTGTTGA	CTTGTGTGCA	ATGGGGAGAG	420
GTACCATGAT	GAACTCACA	GGGAGCCACT	GTTCACTGAC	ACTTGAAGG	CCCTGCCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GTGTTTGCCC ACACCCTCCT TGAATTTAAC TGCCACAATC TATCCGCAGA TGTGTTTTGT      60
TCTGTTTCTT GTTTTTCCTT AGCGTTTGCG TTGCTTCCTC TGAAGCCAGA GGGTGAAAGG      120
CCCTAGCAAA GTTAGTTATC AGTCAACTGA TGATAACTGT GATCCTTAAA GATGAATTCC      180
CAGCCTGAGG TGACACACAG AGGTTTCAGCA GACGTCTCAG GATCTGTCAC ATGTCATGTT      240
GCTTGGTGTG AAGATGGAAG AACAAAGTCC ACATCAGTTT CTGCTCCTTC AAACAGTGTG      300
TCGATATGAA ACATTGAGAT TTGGCAGAAA CATGTGCCTA GTTTGCAGCA CCAAACTACTC      360
GAG

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTCATGGCCT AAAGGGATAT TCACTCAAAT CCCTAAGTAT TTCAGAAACA      60
GCCTGAGAGC AAGTCCTTGG CTCGCTTTC TAGTTTAAA AGGCTTTTAA CTGTTTAGTC      120
TGAGATTCCC CTAAGAGTTC CAGGAAAGCA AACTCAAAAA GAGCCTAGGT GGTCAATCAT      180
TATTTTGTCT GCGTTTATAT AAATAATCAG GCCAAGTTAA TGAGACTAAA CTTATTTTGC      240
AAGCAAATCA GTCTTTGCTT ATTTTGGTA GGAATGGGGG TAAATGGAGA GAGAGAAATT      300
ATGTTTCAGA AGAAACTAT AGCACACCAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AGTGGGAAAC ATTATTTCAA GACATTAGGG ATAAGAATGC      60
CAGTTTGCTAC TGAGTTGGTT ATTGTTTCAA GGATTTATCA ATACATAGAG CAAATAATTA      120
TGTTTGTCTT TGTCTTATTT TTATTTCTTT ACTTTAGAAA CAGTACAGCT ACTTACAAAT      180
CAAGTTTAGA ACTCTCAGGT TATCTTAAAT CTGAAGCTTC TACCTTCCTA AGAACAAAAC      240
ACCGGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

```

GTTCAACCAG TTCAAACTACT TTTTCAACCT CTATTTCTTA CTTCTTGCCT GCTCTCAGTT      60
TGTTCCCGAA ATGAGACTTG GTGCACTCTA TACCTACTGG GTTCCCCTGG GCTTCGTGCT      120
GGCCGTCAGT GTCATCCGTG AGGCGGTGGA GGAGATCCGA TGCTACGTGC GGGACAAGGA      180
AGTCAACTCC CAGGTCTACA GCCGGCTCAC AGCACGAGGC ACAGTGAAGG TGAAGAGTTC      240
TAACATCCAA GTTGAGGCC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

```

GAATTCGGCC TTCATGGCCT AAGATGATTG TGCTATTATT GTTTCCTTG CTCTGGATGG      60
TGGAAGGAGT CTTTCCCAG CTTCACTACA CCGTACAGGA GGAGCAGGAA CATGGCACTT      120
TCGTGGGGAA TATCGCTGAA GATCTGGGTC TGGACATTAC AAAACTTTTCG GCTCGCGGGT      180
TTCAGACGGT GCCCAACTCA AGGACCCCTT ACTTAGACCT CAACCTGGAG ACAGGGGTGC      240
TGTACGTGAA CGAGAAAATA GACCGCGAAC AAATCTGCAA ACAGAGCCCC TCCTGTGTCC      300
TGCACCTGGA GGTCTTTCTG GAGAACCCCC TGGAGCTGTT CCAGGTGGAG ATCGAGGTGC      360
TGGACATTAA TGACAACCCC CCCTCTTTC CCGAGCCAGA CCTGACGGTG GAAATCTCTG      420
AGGGCGCCAC ACTCGAG                                     437

```

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

```

GAATTCGGCC TTCATGGCCT AGTACCTTAA AAACCTTGGA AATAATAATA ATAATAATAA      60
ACAAAAAATA ATCCCAAACC CCGTAAGTTT AACTTTCTAT GCTTTGGCTG TTTTGGTTT      120
ATTTTTTGT TTTTAGAAGG GGTCTCGCTC TGTCGCCAG AATGGAGTGC AGTGGCTTAA      180
TCAGGGCTCA TTGCAGCCTC GACCTCCTTG GTTCGGGCGA TCCTCCTCCC TCCACACTCG      240
AG                                     242

```

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

AATTAAATTA AATTAAATC TTTGTTACAA ACTATGAAAA TGAATATAAG TAAATTTTCAT	60
ATCATTTTCTT TTCTAGATTT ATTATCTAGG ATAGATTGTTG ATGAACTAAT GAAAAAAGAT	120
GAACCGCCTC TTGATTTTCC TGATACCTTG GAAGGATTG AATATGCTTT TAATGAAAAAG	180
GGACAGTTAA GACACATAAA AACTGGGGAA CCATTTGTTT TTAACACCG GGAAGATTTA	240
CACAGATGGA ACCAGAAGCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

GAATTCGGCC TTCATGGCCT AACCTGGAGA AACTATTTAA GTTGGATGAA GCAAGTGCCC	60
AGCTCCTTGC TTATAAGGAA AAAGGCCATT CTCAGAGTTC ACAATTTTCC TCTGATCAAG	120
AAATAGCTCA TCTGCTGCCT GAAAATGTGA GTGCGTCTCC AGCTACGGTG GCAGTTGCTT	180
CTCCACATAC CACCTCGGCT ACTCCAAAGC CCGCCACCCT TCTACCCACC AATGCTTCAG	240
TGACACCTTC TGGGACTTCC CAGCCACAGC TGGCCACCAC AGCTCCACCT GTAACCACTG	300
TCACTTCTCA GCCTCCACG ACCCTCATTT CTACAGTTTT TACACGGGCT GCGGCTACAC	360
TCCAAGCAAT GGCTACAACA GCAGTTCTGA CTACCACCTT TCAGGCACCA TAGTGACTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

GAATTCGGCC TTCATGGCCT ACCGAAGGGC ATCCCATCGG TTGGGTAGGT CATGGTTAAA	60
AAATCATCTC CTTTGGTTGC ATATTTAATT ATTTTCCACT ATTTTTCCT CACACAAAAT	120
GATTTTGCCC GGTACCTTTT TTGGGGGTGC ACAGTCCATG AGATGAATAT TGAATGGGGA	180
GACCTGGGTT CTAGTCTCGC ATTTACCAGT CAGGTTACAA TGCGACCTTG AGCAAGTCAC	240
TTCACCTCCC AGCGCTCAG TTTCTCATT GTAAGATAGG AAAAGCCTTG TCATTTTTTA	300
AATTTTATTT TTTGCATATA CCTCATGGCG AACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

GAATTCGGCC	TTCATGGCCT	ACTATGCTCT	GCACGTGGGT	CATTTCCTAC	TGGTTTCTAA	60
AAGCCTTTCA	TTTTCTGCCT	GTACACAATA	GCCCCCTTC	TCCATTGTTT	TTAGGATCCT	120
TTTTCTCTT	ACCAGCTGTT	AACCTGGAAG	TATTTCTTCT	TCATCCCGAA	TCTCCCATGT	180
CCTCCCCACT	TCTATTTGTT	TCCATCCAAT	GTGGATTCAT	GATCATTTTA	TGGATTTTAA	240
ACTACTCTGG	GGCTACCCCT	GAG				263

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GAATTCGGCC	TTCATGGCCT	AGAAACACAT	GTGATCTGTA	CTCATGAGAA	CCTGTAGTTA	60
ACTATACGAG	CCTTGCTGTG	CATTTGTGTT	TTATCTGAGC	CTGTCTTCA	ATGTCCTATC	120
CCTTGAGAGA	ACTGAGGGCT	GAGAACCAAG	CTTCCGAAG	CGGTCTGAGT	GTGAGCGGTG	180
GTAGTGGTCT	CTGGAGAAAA	GAATGGAGAC	AGGATAGGAC	TTGGAGAAGA	GTGAGTCATT	240
GTTACCCAGA	AACCTGGAG	AACACTGGAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GGGCGTTCTC	ACGCCGCAA	CAATTCCTGA	GTAGGGCCTT	GCTTGAGTTC	TTCGGAAAGT	60
CTCATCCACC	CCCACATCGC	CTCTTTAGGA	AGTCACTTAA	TGTTGGGCTT	CATATTATCCC	120
ACATCCCTTT	CCTTACTACT	TGCCTGCACT	TCTTGAGAAA	AAGACTGCAG	AAAGGAGAGG	180
TGGGGCTTTC	AGTAGAAACA	AGCAAACCGC	AGGTCCCTGT	GGGGGGACTC	TCCAGGAAGA	240
AGGGTAATTT	CCTGCCTCCT	TAAATTGGCT	GCTACTGTCA	GTTATTTTGC	TCCCAACCCC	300
AGAGCTTCAC	TTGCTCCTTC	ACTTCCCAGT	TCCGCAAGAA	CCGTGGGCGA	CAGTTATGGA	360
GAAGCGTCTG	CAGGAGGCTC	AGCTGTACAA	GGAGGAAGGG	AACCAGCGCT	ACCGGGAAGG	420
GAAGTACCGA	GATGCTGTGA	GTAGGTACCA	TCGAGCTCTG	CTTCAGCTGC	GGGGTCTGGA	480
TCCGAGTCTG	CCCTCTCCGT	TACCTAATCT	CGGACCTCAG	GGCCCGGCC	TCACGCCTGA	540
ACGACCTGCC	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GTGAAGATGG	ACTGCTCTGG	GGCCCATGTG	CAAGTGACCT	GTGCCAAGCT	CATCTCCAGG	60
ACAGGCCACC	TGATGAAGCT	TCTCAGTGGG	CAGCAGGAAG	TAAAGGCATC	CAAGATAGAA	120
TGGGATACGG	ACCAATGGAA	GATTGAGAAC	TACATTAATG	AGAGCACAGA	AGCCCAGAGT	180
GAACAGAAAG	AGAAGTCGCT	TGAGCTCAAA	AAAGAAGTTC	CAGGATATGG	CTATACTGAC	240
AAACTCATCT	TGGCATTAAT	TGTTACTGGA	ATACTAACGA	TTTTGATTAT	ACTTTTCTGC	300
CTCATTGTGA	TATGTTGTCA	CCGAAGGTCA	TTACAAGAAG	ATGAAGAAGG	ATCACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GAATTCGGCC	TTCATGGCCT	AGCTCCTGCG	TAAAGGAGCA	TGAGAGCGTG	GGAGTTTTCG	60
AGTGGCCGTG	GGGTTCTTCG	TCGCGTCTCG	GTCGGGCGTC	GCTTTCTGCA	GCTCCTGTCA	120
GGGAGCGCGA	GGCCTGTTAT	TAACCGCGGA	GCGCTTTGTC	ACGAANTCCC	TGTGGCGTCT	180
TGAAGAAGGC	ATTCCCCACC	CGCCAAATGG	CGTCCATGCC	CCCGACGCCC	GAGGCCCCAGG	240
AGAGTCGAGG	TACCTTTTTC	GTCCAAGTTT	ATNGCTGCTT	TCGGTCTCTG	CCTGACCCCN	300
TCCTTTGGAG	GAGAGTTGGG	CATGCCTGTT	GTGGTAGGAG	TGCTCNTGAG	CCCCAAATAG	360
CCCTTTGACC	AAGTGTCTT	CGTTCCAAGA	CCACACACAT	AATGTTTAC	CAACTTCNTT	420
CTTTCAGAAC	TACCAACTGG	GAGCAGGGAC	CTGTGGAGGA	ATCTCTGAGA	GAGTTTCTCA	480
ATGTCTTATC	TGTTTGTTTT	GTTTGTGTTG	GAGATAGGGT	CTGGCCTTGT	CGCTGGAGTG	540
TGTCTGTCT	GGCTGGAGTG	CAGTGCTGAT	ATCATAGCTC	CGTCTGGAAC	TCAGGGAATC	600
CTTACGCCTC	AGCCTCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GAATTCGGCC	TTCATGGCCT	ACAATTTGGA	GCAAGGCTTA	GCAGAAGACG	GCGGCATGAG	60
CAGCGTGACT	CAGGAGGGCA	GACAAGCCTC	TATCCGGCTG	TGGAGGTCAC	GTCTGGGCCG	120
GGTGATGTAC	TCCATGGCAA	ACTGTCTGCT	CCTGATGAAG	GATTATGTGC	TGGCCGTGGA	180
GGCGTATCAT	TCGGTTATCA	AGTATTACCC	AGAGCAAGAG	CCCCAGCTGC	TCAGCGGCAT	240
CGGCCGGATT	TCCTGCAGA	TTGGAGACAT	AAAAACAGCT	GAAAAGTATT	TTCAAGACGT	300
TGAGAAAGTA	ACACAGAAAT	TAGACGGACC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGGCC AAAGAGGCCT ACATTACTGG GTTAGAAAAC AAAGAGGGAG TGCCCTGCAC	60
ATTTTCTTTT GTGCTTTTAA ATGTTTCTTA AGTTGGAACA GGTTTCCTCG GGCCTGTTTT	120
CACTGATTGC TGGAGTGCAT TTGATAGTTA AAAATTACTA ATTGGTTTTA TTTCCCTTCA	180
CACTCTGCCT CCCCTATTTT CCCCAATTGA CCCTAAACCT CGAG	224

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 249 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GATTTAATGC ATGCTAGCAA CAGCCTTAAC TTTGGATTCA GTTATTGAA ACACTTTTCC	60
GGCATCTTTC CCTTTCTAAT GTTGTGGGGT GGAAACCGGA TGGCAAATCA CTGTGAGCCG	120
GATACCTCAG CACAGTCCAC CTTGTGTGTG ACTTCACAAA TGGGGGACTT CACAAATGGG	180
GTAAGTGAAT GTTATTACTT TCAAATTTG ACATGGAGCA TTATGATCAA GGAAATGGAG	240
CAACTCGAG	249

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GCTGCGCGC ACCCTGAGAG ATGGTTGGTG CCATGTGGAA GGTGATTGTT TCGCTGGTCC	60
TGTTGATGCC TGGCCCCTGT GATGGGCTGT TTCCTCCCT ATACAGAAGT GTTTCATGC	120
CACCTAAGGG AGACTCAGGA CAGCCATTAT TTCTACCCC TTACATTGAA GCTGGGAAGA	180
TCCAAAAAGG AAGAGAATTG AGTTTGGTCG GTCCTTTCCC AGGACTGAAC ATGAAGAGTT	240
ATGCCGGCTA CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 229 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

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GAATTCTAGA CTTTGTCTCC AGAGCATTGC CTTTATAAGC AGATTGGCAC CAACAGTTCC      60
ATAGTTTAAAC ATCTAGTTAA GCTACAAATA TAGTATAAGC ATTATTAGCA GCTGGTACTT      120
CTGCTAGGGG TTGTAAATTC CAGGTGTTAC ACTGACCTCA ATCCAATTTA CATAATTTAC      180
ATAAATGCAT CTCGGTGGAA AAATAATCAT TTTCTTGGCA TATCTCGAG      229

```

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCC TTCATGGCCT ACACTGCTAT GTATGTTTTC TCCTTAATGA TGAAGAGTGT      60
AGATGATGCT AATAATAGTA GCTGATGTAC TGACTTTTAG CTGTGTGCAA AGCCATGTTC      120
AAAATAC'TT ACAAGTGTTA ACTTGTTTGA TCTTCACAAC AACCCTAAGA AGTGGATATT      180
ATTAAAGTAG ATTTTGGGAAG ACTGATCTAT TTAATTATTA ATAGATCTGT CTCATTCC'TT      240
TTTTCCCCCA ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT ACGCGTCTGC TTCGGAGACC GTAAGGATAT TGATGACCAT      60
GAGATCCCTG CTCAGAACCC CCTTCCTGTG TGGCCTGCTC TGGGCCTTTT GTGCCCCAGG      120
CGCCAGGGCC TTTTGTGCCC CAGGCGCCAG GGCTGAGGAG CCTGCAGCCA GCTTCTCCCA      180
ACCCGGCAGC ATGGGCCTGG ATAAGAACAC AGTATCACTC GAG      223

```

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

GAATTCTAGA CCTGCATGTC CCAGTGTGAA ATTCAGCAC GGCATTTTCT GCATCCTTTC      60
ATGGCCATCC AAAGGATTCC GCTGCAGAAA TTATTGATGT GCTATTTTGT CTGTCTTGTG      120
ATGCAGGCTG CTTTGGGCCC CTGGGTCACT CTCCAAGGC TGCAACTCGA G      171

```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AAAAAGCAAA AGAAAAGTAA AAGGAAGAAA CAAGAACAAG      60
AAAAAAGATT ATATTGATTT TAAATCATG CAAAAACTGC AACTCTGTGT TTATATTTAC      120
CTGTTTATGC TGATTGTTGC TGGTCCAGTG GATCTAAATG AGAACAGTGA GCAAAAAGAA      180
AATGTGGAAG AAGAGGGGCT GTGTAATGCA TGTACTTGGG GACAAAACAC TAAATCTTCA      240
AGAATAGAAG CCATTAAGAT ACAAATCCTC AGTAAACTTC GTCTGGAAAC AGCTCCTAAC      300
ATCAGCAAAG ATGTTATAAG ACAACTTTTA CTCGAG      336

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC AAAGAGGCCT AGAAGAGCAA GCGCCATGTT GAAGCCATCA TTACCATTCA      60
CATCCCTCTT ATTCCTGCAG CTGCCCTGCG TGGGAGTGGG GCTGAACACG ACAATTCTGA      120
CGCCCAATGG GAATGAAGAC ACCACAGCTG ATTTCTTCCT GACCACTATG CCCACTGACT      180
CCCTCAGTGT TTCCACTCTG CAGGCTCTCG AG      212

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAATTCGGCC TTCATGGTCT ATGCTACTCA GTTGGATCTA GCAGAAACAA AAGCTGAGTC      60
TGAGCAGTTG GCGCGAGGCC TTCTGGAAGA ACAGTATTTT GAATTGACGC AAGAAAGCAA      120
GAAAGCTGCT TCAAGAAATA GACAAGAGAT TACAGATAAA GATCACACTG TTAGTCGGCT      180
TGAAGAAGCA AACAGCATGC TAACCAAAGA TATTGAAATA TTAAGAAGAG AGAATGAAGA      240
GCTAACAGAG AAAATGAAGA AGGCAGAGGA AGAATATAAA CTGGAGAAGG AGGAGGAGAT      300
CAGTAATCTT AAGGCTGCCT TTGAAAAGAA TATCAACACT AAATCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```

GCGGGCTAGT CATGGCGTCC CCGTCTCGGA GACTGCAGAC TAAACCAAGT ATTACTTGTT      60
TCAAGAGCGT TCTGCTAATC TACACTTTTA TTTCTGGATC ACTGGCGTTA TCCTTCTTGC      120
AGTTGGCATT TGGGGCAAGG TGAGCCTGGA GAATTACTTT TCTCTTTTAA ATGAGAAGGC      180
CACCAATGTC CCCTTCGTGC TCATTGCTAC TGGTACCGTC ATTATTCTTT TGGGCACCTT      240
TGGTTGTTTT GCTACCTGCC GAGCTTCTGC ATGGATGCTA AAACGTGTAT CAATGTTTCT      300
GACTCTCGTT TTTTGGTTCG AACTGGTCGC TGCCATCGTA GGATTGTTT TCAGACATGA      360
GATTAGAAGC AGCTTTAAGA ATAATCTCGA G              391

```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```

GAATTCGGCC TTCATGGCCT AGGGAGTCTG AAGCAATTC TGAAGAAGAC CAAAAAGAAG      60
CACAAAGACG TGAATGAAAA GGCATGGAAG CGTTGGTGCA CACAAATCCT CTCTGCCCTA      120
AGCTACCTGC ACTCCTGTGA CCCCCCATC ATCCATGGGA ACCTGACCTG TGACACCATC      180
TTCATCCAGC ACAACGGACT CATCAAGATT GGCTCTGTGG CTCCTGACAC TATCAACAAT      240
CATGTGAAGA CTGTGCGAGA AGAGCAGAAG AATCTACACT TCTTGCACC AGAGTATGGA      300
GAAGTCACTA ATGTGACAAC AGCAGTGGAC ATCTACTCCT TTGGCATGTG TGCACTGGAG      360
ATGGCAGTGC TGGAGATTCA GGGCAATGGA GAGTCCTCAT ATGTGCCACA GGAAGCCATC      420
AGCAGTGCCA TCCAGCTTCT AGAAGACCCA TTACAGAGGG AGTTCATTCA AAAGTGCCCTG      480
C              481

```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAT TCTAGATCTG CCCGTCTTGG CCTCCGAAAG      60
TGCTGGGATT ACAGGCGTGA ACCACTGTGC CTGGCATATT TGTCTATTAA TTTGCTTTTC      120
TTTAGATGTA TTCTAGAGGG GGGAAATCA GTAGAAGAAC AGTTATGTAA TTCTAACAAG      180
TTCTCCATGT GTCTTGCCAT CTNGCTTTT CTCATCCTAT CAGTACTGGA TGAGAATGTT      240
TATTTCACTG AACTTTGCCA AAGAGTTTCA ACATTTTTT GTTTAATCAT AGGAGAAAAA      300
GGTTTATCTT ATTTTAAAAA ATTTTATTT AATTCTTTCA TTACAAATGA AGTCCCAGAA      360
GTTGATTTG TTTCTTAGG CTGTTCTTAA TTGTTTATTG GAACAGGCAG GGTTTGAAGG      420
AGTGGGGATA CTGGGAAAGC CAGGGTGATG AGAAAATAGG AAAGGGGTCT TGTATTGGG      480
AGGCCACTAT ACCAGTGGCC CTTGTACCAG GACTAATATG GTACTTTGAA GCTTTAAATT      540
CATTTCTTAA TTCAATAATT TTAGGCATCC CAGGATACTC GAG              583

```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

GAATTCGGCC AAAGAGGCCT AGCTATCCGC TTTGCTATTT TAGTGGCATT ATCAAAATCA      60
CTGGAAGCAC CTGTNGTAAT ATGGTCGGTT CCAAATATAA GCTCCTCTGC CACTCTTCCT      120
CCCATACTAA CATCCATTTG TGCAAGCAGC TGGGCTCTAG TTTCATTCCA TCTGTCATTC      180
TCAGGTAACA GGGACACATG TCCAAGTGTT GGCCCCCGTG GCATGATTGT AGCTTTGTTG      240
ATAGGCATTG CATCTTTTGT GTAATATGCA ATAATGGCAT GACCAGATTC ATGATATGCT      300
GTGATGGTTT TGTTTTGTGTT ATCAATTTCC ACACTTCTTC TTTCAGGCCC CATTAGAATT      360
TTGTCTTTGG AAAACTCCAG CTCCTTCATG GTAACCATTT CTTTCCATC AACAGCTGCT      420
TTTAATGCAG CCTGGTTCAC AAGATTCTCC AACTCTGCTC CGGAAAAGCC AACAGTACCT      480
CGAG

```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

GAATTCGGCC AAAGAGCCTA ATTGAATTCT AGACCGGCCT CATCGTTCTT TGCCTTCCTG      60
GTCACCATCT GCTACGCTGG AAATACATAT TTCAGTTTTA TAGCATGGAG ATCCAGGACC      120
ATACAGTGAT TTACCATTTT GATAATTAAA AGGAAAAAAA AAGGAAGACT CTCACTGTAA      180
AAACAGCTGT AGGTATAATG TATATTCCCA GAGAATTGTA TTTAACTAAT TAATGTTTTT      240
TATATTCTTA AATTTGCTCA CAAATTGTGG TTTGTTACAA TTAACTGGA TACTTATTTG      300
CAAAGTGTTG TAGCTTATAA TGAACCTCTA AGTATCTTAT TAATGTATTA ATGTCTTCAT      360
AGATCATATT TTCTTAGACA ATGTTTAAAT AGATAAATTG CTAATATTGA GAATGTGTCA      420
AGTTTGTAAG CCTAACTTTT AAGATGCCAG AACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGGT GGTGATTGAC CTAAGAAAAA      60
AGTGTCTTAA ATATCTGGAT TCTATGGGAC AAAAGGGCCA CAGGATCTGT GAGATTCTCC      120
TTCAGTATTT ACAGGATGAA AGTAAGAACC GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GAATTCGGCC AAAGAGGCCT AGTGGACTGC TACTTCCCTT TAGCACTATA TACAAACATA      60
ACTGCTACTT CCCTTTAGCC CAGGATCAAA ATAATGATTC AGTTAAAAGT TGCTTGCCTA      120
ACAAAATTTT AAAATATGGA CTTCTGTGAA TTGCTAAAAC ACATCCTTTT AACTAGGCAT      180
CTTTAAGTCT ATAGTATCTT TAAAGTTAAT TTCAAAATTT AGCAGAGCCT GGAACACAAA      240
TTATTCAGGA AATAATTCCT GAACCTACCT CTATCTTCAT AAAACGTATT GGGGCAAGAA      300
CTATTCTATT GAATTCTAGA CCTGACTCGA G                                     331

```

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

GAATTCGGCC AAAGAGGCCT ACCATCTGTC ACTAATATCA AAGGAGGGCC AAGGACACAG      60
CCCTGGGGGA ACTTACCAGG TCAACCCACA ATGGGTGAAT TTATAGTTTG TTAGTTAGTG      120
GTCAGTTACC AACTTCTCTG TCTGTCTAAT GCTTTGACTA AAATGTCCAG ATTATTTACC      180
TAGTTAACAA AATTAAAGAA GATTCTAAGA CCAGTTTAGC ATCATTTTCT CTGAAGTCCA      240
TAATGAATGT CTGTTAAACT CTCGTCACTC TTATTTAGGT GCTTTTGGGT CATTGTGTGT      300
AGGTTTCATT TCCCAAATCA ATGTCACATA TACGTCGTA ACTTGTGTTA TCAGCTTCCT      360
TCCTAGGGCT TTAAC TTCTT TTCAGTCTTA TAGCATTCCCT TCCATTTTCC TTTCAGTTCA      420
CTCCAATAAA AGCTCGACAA ACTCCTGGGA GCCCCTTGGT GCTCGAG                                     467

```

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAG TCTAGATGCA CACATTCAGC TTCTGTCTCA      60
GTCCTGAGAG TGGTGTGTGT TTATTGGCTG ATGAGTTATT TCCACATATC ACATGTATAA      120
GGTATTTGAA TGAAGGTGCT TTGTAGTCAT GACACACTAC TCTTTTACTA ATTATTAATA      180
TCTTAAGATT ACAATTGAG AGGTAGAGAT GGTATTGTTT TTAATGGGTG TGGGGGGTGG      240
TGATGATAGG TATTTTACC CTGGTAAGTG ACCTACTAGG TTTTATTAAG TGTGCAACT      300
TGTCAGTGT GTGGATGGGA TCTCGAG                                     327

```


(2) INFORMATION FOR SEQ ID NO:73:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 206 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```
GAATTCGGCC AAAGAGGCCT AGTGGTGTA TGTATTGAG TTCACAGTAT TTGTTTATA      60
GCAGTTTTCG AAGCACATAC TGTGCCACGG ATTTTCCCAC ATTATTTTGA GACAAGGGAA      120
CACAGCCATC AAAACTGATA CCATGGCCGG GCGTGGTGGT GGGTGCCTGT AGTCCCAGCT      180
ACTTGGGAAC TCGGGACATT CTCGAG                                         206
```

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 184 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```
GAATTCGGCC AAAGAGGCCT CCACCATGCC CGGCCTCAAC GATATTGATT CTTGGGGCTG      60
TAGTCAGTAT TGGATTATGA TCAATATTAT CACCATTTAT TTTGTTGCTC CAGTTCTTCC      120
AGCTGTGGCC AATCCTTCAG TTGGATTCTT GTGCCCCATC AACATTCTCC ATCCTTCTCT      180
CGAG                                                                    184
```

(2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```
GAATTCGGCC AAAGAGGCCG ACTTTATTAT ACCATACATA CTATAGGTAC CTGGGCACAA      60
GATAGGTCAG GGGGTACTGT ACCCCTATTT ACATGCTTAA TCACATCATA AGGTTGCAGG      120
TGGTACTTGA AATCATCACT AATGAGACAG CAAATATGTT AGACTTGCTG GCCCAGCAAG      180
CCACAGAAAT AAGGATCACC ATCTATTAGA ATAGACTGGC TTCAAACTCG AG          232
```

(2) INFORMATION FOR SEQ ID NO:76:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

GAATTCGGCC AAAGAGCCTA CTAAATTCC TTGTTTGTG TTTTAAATAT TCCATCGTTG	60
ATAGTTAATA TTCTTTTNGA GGTTTTGTG TAGACAAAGT AATGTTTTTC TGAAATGATT	120
CTAAGACAAT TGGTCAGAAA TAGTCTCTGC TTGTTTGTT TATGTTGGT CAGTTGTGCT	180
TTGATTATAG ATGTTTCCTC ATCTGAGATT AAAGTGGGAC AGAACTTCAA AAGTAAAGG	240
GTAAATGTTT GCTGTGATGC TTATGTGGCA CATGTGCTAG TCCTTGATAG TGGCGAGAAA	300
GATCTTAATT GCTCAAAGGA AGTACTCGAG	330

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GAATTCGGCC AAAGAGGCCT ACAGTGCATT ATGTTATTTT GTTATCTCTG CAGTAACTTT	60
CTATCATGTT ATTTATTTTC TTTGCTTAT TTAAAGCTTC TGAGATTATG GATTTTGTGTT	120
TCCTTCCCTG AAGTTAAGTG TTATCATTCC TATATAGTAC TAAGCTGTCT ACAGAATAGT	180
GGGAGTCTGC CCTCTTGAGT TGGGAAGATC CTAGTTTGAA TCTTGGCTGT GCGACTTTAA	240
AGTTCATTAA CTTCTCTTAG CCTCAGTCAC CTGAAGCTCTG CAGTGGGGAT CCTTATGCCT	300
CAGAGTGTCA TTGGGAGGAC TCACGAAAAT ACGCTTGATC TTTGAGTTCA GTACCTAGCC	360
TGTATGAGCC AGCATTAAAG GGGACAGTCA TCACGCAGCG CTTTGCACAC AGCTCTCAGC	420
CCACATCCTT TGGCTACTGT TTTGGTAAAT CTTTACTAGT AAATGTTTCT TAAAAGCATT	480
TACATTCATG GACATGATTC CCTCGAG	507

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC AAAGAGGCCT AGATTGAATC TAACCTTTTT GCCTCTTCCC AAGTAGCCTA	60
TTTGAGCTAG AACAAAACCT TGTTAGCCAT TTTGGGAGAG AATAGGGAAT CTAGAGAATG	120
AAGATCTGCC CGACCTGCCT CGAG	144

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC AAAGAGGCCT AACGACGGTA ATCAAGTTTT GCTCCAGAAG CATCAAGAAA	60
CTTAGCTACT GCTTCCAAAT CAGTACCGGT TTCAGTTAAG CCTTGAATAA TACAGTCTTG	120
AAACTGAGTA GGGTCAAACC TCTCTTTTTC ATCTCTTTT CTAGTTTAA AACGCTGGCC	180
TGATAGCGTT GGCTTTTGCT GCTTTTGATT ATTCATAAAA GACACCCGAA TTTAAGGCGA	240
AGAGGAAAGA GCCAGAAATC CCCGATGTAC CGGCAACTGC GGCCTATCT CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

GAATTCGGCC AAAGAGGCCT AGACTGCTGG TGGTGAAGT CTTTCTTGT AGGTTGTGAG	60
GGCTGAAAAA GCCAATCTTA ATAGACATGA GGCTCATGTT TGCACAGTGT GCTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

GAATTCGGCC AAAGAGGCCT ACTCAGCTGC AAAAAAGCAT ATTTTCTGTG TTTCTGGAAT	60
GCACTGTNGT CCTTGCCCTC ACATAGACAC TCAGACACCC TCACAAACAC AGTAGTCTAT	120
AGTTAGGATT AAAATAGGAT CTGAACATTC AAAAGAAAGC TTTGGAAAAA AAGAGCTGGC	180
TGGCCTAAAA ACCTAAATAT ATGATGAAGA TTGTAGGACT GTCTTCCCAA GCCCCATGTT	240
CATGGTGGGG CAATGGTTAT TTGGTTATTT TACTCAATTG GTTACTCTCA TTTGAAATGA	300
GGGAGGGACA TACAGAACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GAATTCGGCC AAAGAGGCCT AGGCAAATCA GAACTCTTAA GTTGTTTCAT CCTTATTTA	60
TTCTTAAAT AAAGAATTTC ATTTCAAATA CGGATTAATT TTTTCTGG GAAAAACAC	120
ACTGTAAAC ATAATTTTCT ACCTTTTAAA ACGTTTACA ATTTATCCCA TCTTCTAACA	180
AGTTATGATA CTCATACCTG CCGAGGTTTC TCTAAATTG TCGCTGGTCT TCTTTTCCT	240

CCATTTC	CAA	GGCTTAA	AGA	TTTTACCA	AT	GGTGGATAGT	TTCCCTTT	C	TTTTGAAGGG	300
AGGTGTT	TGG	GAACCTG	CTG	TGGGGCCATC	TGAGTTTGCT	ATAGAAGCTT	TGTCCAGTCC		350	
GTCAACT	GAG	CCGGAGATGT	GGACCCGGAG	CGGGCGGCC	CTGCTCGAG				409	

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTCGGCC	AAAGAGGCCT	ATAAATATAT	AATTGACTTA	TTTATTAAAT	TTAGGAGAAA	60
AAAAAAGTTT	TCCTTGACAT	TCAGCTCTAT	TGGATTATT	TCCATTAAAT	TGCATCATGT	120
GTTATGTCTT	GGTAAACACT	CCATTTCCTG	TCTTGGTGGG	CATCCTGTCT	GTGTACCTGT	180
GCAGTACACT	TTAATCATCA	AGACTTCAAA	GTGCTTTTGA	GCTATCAAAT	CTTGGGAGAG	240
TCCCATCTAG	CATCTTAATA	ATTATTTTTC	CAAGTTCGTT	ATAATTAACT	CCTTTAACCT	300
CATCTCATTA	AATCAATTTT	GTATTATCAT	TCTGTTGTTT	TCTGGAAAGC	AGCCAATTGT	360
TCAGCTCTTG	AATCAGAATT	TTCAAAGACT	CACCTCTCTT	ACCTGGGCTT	GCACATATTT	420
GTCTTAAGTA	ATTCTCTATC	CCTTAAACCT	CTGAGCCCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC	AAAGAGGCCT	AATTTTGTA	AAAGGAATAT	CATTCTTTGA	TTTAGATCT	60
TAGACATCAG	GCACTGACAT	AGAGCTTAGA	TATGTTCTTA	AGGTAGCTAA	GCCATTATT	120
ATAGGATAGT	CAGATAGGAT	AGTTCTAGGA	TTTATAGACC	TTTTCAGATA	CTCTTTATCC	180
AGTGAGAGAT	GACCTATTTT	TATTAATACT	TGGGTTTGGT	ATCTTGGAAT	TGGCTTGAAA	240
ATGATTGTGT	TTTACATTGG	ATGTGAACGG	AAAGTTTGT	TCTCAAATGT	TTTACCACCT	300
GAAGGGACAG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GTGGACATGG	AAGTAGGTGA	GTTGGGGGA	CCTATGAAGA	AAAAAAGAGC	CTTCCACTG	60
GGCAGTGAAG	TGTGTACACA	CACACTGGGG	GCAGAGCAGT	GTGAAAACAT	TCTGCACCAG	120
CACACAAATG	ACTTTTGCA	AATCATCTNC	CTGATCTGTC	GGATGTTACG	TCTCTGCAGA	180

```

ATCTGGAGAA AACAGAAAA CCCAGCTTGT TTGCCCTCAT TTTGGCAGTT TAATTTAGGA      240
ATCACACTGG CTTTACATAA ACTCTTTACC AAAAAAAGT TATTCTGTAT TTTGAAGGCA      300
CAAGTTAACA TGGGCCCAAG GGAAGGAAGC ATTGTATACA ATTACATAAT AGCTACTCTA      360
TTACTTTAAA ACCTAATGGC AGCCTCGGGC AGAAAAAGTCA AAAGGGGAGA GAAACCATT      420
CTGTGAAATT ATCTGATGCA ATCATCTCTT TGGAGACATT GTCAGTTGAC AATGGTTCTG      480
CTTTTCTCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

```

GAATTCGGCC AAAGAGGCCT ACGGGAGCAG TTCATGCAGC ACCTCTACCC ACAGAGAAAA      60
CCTCTTGTGT TGGAAGGGAT TGATTGGGG CCATGTACAA GCAATGGAC AGTGGATTAC      120
CTAAGCCAAG TTGGAGGGAA GAAAGAAGTA AAGATTCATG TTGCTGCAGT TGCACAGATG      180
GACTTCATTA AACTTTACCT TTTGACCACT TGGTCCAGAG GGCAGCTGAA GAGAAACATA      240
AAGAATTCTT TGTTCAGAG GATGAGAAAT ACTACTTACG GTCACCTGGA GAAGACCCTA      300
GAAAGGATGT TGCAGATATC AGAAAGCAGT TTCCTTGTT GAAAGGAGAT ATTAAGTTTC      360
CAGAATTCTT CAAAGAGGAA CAGTTCTTTT CCAGTGTGTT TCGAATTAGT TCACCAGGAT      420
TACAACTATG GACTCATTAT GATGTAATGG ATAATTGTT AATACAAGTG ACAGGAAAAA      480
AGCGTGTGT ACTCTCAGT CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC AAAGAGGCCT AGCTTATCCA GTCTAGTAAT TTTTGTGTA TGTGTGCACA      60
GCACAAATAG TTACAATAGT TCCCTTTTTT GACATCAAAT TCAACAATAC CTGGCATATA      120
ATTGCTAAAT ACTGTCATCA TTTTCATTAT CATTATCCCC CACATAGTCA TAAATAAGCA      180
CACATGCTAA TCTTCAACTC TTCTTCTATT ATTTGCTGCC TTCTTACCTG CGTTAGTGAG      240
AAAGTGCCTT CAAATAGATT GCCAACAGTT ATATGGCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GAATTCGGCC AAAGAGGCCT AGTGCACTAT TCACGTGTAA CTTTAAAGTT TTCAGTACAG      60
TGCTTTTATA CCTTTAATGC AATGTTGTAT TCATTTGGGT ACTATTGTGT AGTATTTAGG      120
ATGTATGCAT GTTTGTTTAT ATGTAAGCTT GATTGGTGCT TTCGCTTTTG TGCTACCTTT      180
CTTGGATTTT TGTACCAGAG ATGTGCTAAA CTGATGAAAT ACATTGAGAA AGTTTCCATC      240
TTATTCTTTT ATATGGGACT GATGATGTGT GTTGGGGTAG ACTGCTCCTG CAGAGTTTGG      300
AAGAAGTCAC CAGCAAAGCC GGCCAATCTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC AAAGAGGCCT AGGTTTCTAG ACTGGAAGAA CAAATGAATG GCTTAAAAAC      60
ATCAAATGAA CATCTTCAAA AGCATGTGGA GGATCTGTTG ACCAAATTAA AAGAGGCCAA      120
GGAACAACAG GCCAGTATGG AAGAGAAATT CCACAATGAA TTAAATGCCC ACATAAAACT      180
TTCTAATTG TACAAGAGTG CCGCTGATGA CTCAGAAGCA AAGAGCAATG AACTAACCCG      240
GGCAGTAGAG GAACTACACA AACTTTTGAA GGAAGACAAG GAACGCNAGA AAAAAGACGA      300
AGAAAAGGTG AAGGCAGAGG AAGAATCAA GAAAAAGAA GAGGAAGAAA AAAAGAAACA      360
TCAAGAGGAA GAGAGAAAGA AGCAACTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTCTG CTTTATTTAT TCATTTATTT TTAATTTTTT      60
GAGATGAAGT CTCGCTCTGT CATCCAGGCT GGAGTGTGGT AGCGCCATCT CAGCTCACTG      120
CAACTTCCAC CTCCAGGTT CAAGTGCAAT GTCTTTTAA TGTCTATGTG AAGGATTCTG      180
AGCTGTACGA GTTCTGCCCC AAATCTGCAC TTGGGCCTCA GGATCAGGCC GCCTCCCAT      240
CAATCTGGTG GATGCCAGTT ATAACCTTTG CCCTGCACCC CATCCACACT GTAGTTCAGA      300
GAAAATCAAC AGTCAGCAAT CATATCACA GCACTCGAG                                     339

```

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

```

GAATTCGGCC AAAGAGGCCT ACGAGTCAGC ATCTAGACTC AGCTCCTTCT TCCGCGCTGC      60

```

CCTCACACAT GCGTGCAATC ACTCTCCTGT CCAGGCTCAT.GTCCTTGTGC CCGCTTGCTG 120
 CTTTGCTCC TTGCTTGTTT CTGACTTGCT CACCCACTCT CTGTCATTGT CTTGCTTACT 180
 CAGGCTCACC CTATCAATC GAG 203

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC AAAGAGGCCT AGTTGAATTA TTGCCACATG TTAGGAATGT GGAAGGTTGC 60
 TTGGATAAAT GAGAAAAGAA AGAAAAGAAT GCAAGTAATG TCCTGCTGGG GTAGTGCAGT 120
 CCTCGAG 127

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 179 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GAATTCGGCC AAAGAGGCCT AGATCCACG AATTTAGGCT CAGAAGCATC GCTCCTCTCC 60
 AGCCCTGCAG CTATTCACCA ATATCAGTCC TCGCGGCTCT CCAGGGCTCC CTGCCCTGAC 120
 CTCTCCCTG GGTTTTCTGC CCCAGCTCC TCCTTCCCC CCCCCCTATA TCCCTCGAG 179

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC AAAGAGGCCT ACTGGAATCA CTAAACTTTG TCTCATTTTT TTTCTTTCC 60
 ATCAAATATC AATTTTGGAT TCAGATCCAG TTTTTTCTT TCAATTATTT CTGCCTTTTA 120
 AAATAATACT ACCTCCTTCC TCCACAATT CATTTAGCT TGTTTTAGTT CCTTGGGTTC 180
 TATATTTTTT CTTCCTAGTA TTACAATATA TGCACAAATA TTAGGTTATA AAACCTCCAA 240
 TACAACTTTT ACTGCCACTC ACAGGTTTTT CAATTGTTTT CATTTTCATG TACATTTAA 300
 TAATGTATAT ATTAGGGATA CTCGAG 326

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```
GAATTCGGCC AAAGAGGCCT AAATATGAAA AGCTGTCTAT ATCTACCCAG CCAAACCATC      60
TCCAGCTTTT ACTTTTATTG AGCAAGTATA CGTTATTTAT TTAGTCATCC ATTCATTCAT      120
TTACTCATTT ATTTATTTT TTTTCAGCTT ATTTCTGCTT TCATCTTAAT TCCTCTCTTA      180
AACTTTTTGG TATCACATTG GTTCTCCCTG ACCTCCACCA CTGTAACCTG ACTTAAGTTA      240
AATGTTTAAT TTATTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT      300
TTTAGGTAGA GAAGATGTCT CACCATGCTG CCCACTCGAG                                340
```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 240 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

```
GAATTCGGCC AAAGAGGCCT ACTTCTTCC TTATTCTACT TCTCTTTTT TCTTTTGTTT      60
AACATCATGT TTGTGAAAGT TTCATGCATA TCGTTGCAAG TATTTGTATT TCATTCATTT      120
CTATTGTTGT ATAATGTTAC ATTGCATGAA TATGCAGCAA TTGTTCTTAC TGTA AAAAGC      180
AATAAGGATT TAGTTATTTT CAGGTTGGAC ACAAATAATT TTGCTATGAA GGGTCTCGAG      240
```

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```
GAATTCGGCC AAAGAGGCCT ATAACTATAT AGCCTAGAAT TTTTCCTATT CTGTTATTAA      60
GCCTCTATCA CTATCTTTG ATTCTAGGTT TTATAATCCA TTCTTTTTTA TAACAACCTG      120
TTCTTGTTTT ACTTTCCCT ATTTTGTGTT TATACCCATC TATCTTTTT TAGGATCTAT      180
TCTCCACTTT TAACTTTGAG GATTCTAAAA TACTTACTTT AAAGTTATTT TTAAGTTGTT      240
CTATTTTGT TTTTGTGAG AGCGAATTTG CCTTTTTTAT TTGGCTGTTC TACCATGCTT      300
TTTGAATTT TGTGTTGTAG GCTTCTCGAG                                330
```

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAATTCGGCC	TTCATGGCCT	ACTCTACTCC	AAGTAGGAAA	AGGCCAGGAG	GTCTGTAA	60
AGGATGCACT	CAGAGCCCGG	GCTCCCTAAC	GTATGAGAGT	GCTAACCCAGC	AGGTGTAGAC	120
TTTTCAGGAG	TGAAGAATGA	GGCAGGCATT	CCAAACCTGG	ACCTTCATCA	CCTTTTGT	180
CATCTCAAGA	CAATTCTGAG	GGACTGTTTT	GGAGCGTGTC	TGGAAGGTGA	ACGTTGAAGA	240
AGAGTGTGGG	CTTTGATGTG	ACTCAGTTGA	ATACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCTCAT	GAAACTCTCA	GCGGAAAGCT	ACAAGGAAAC	ACAGATGGTG	AAGATTAAAG	60
AGGAACCCAT	GGAGGTTGAC	ATCCAGGACT	CCCATGTCTC	GATATCACCC	AGCCGGAATG	120
TTGGCTACAG	CACCTTAAATC	GGGCGAGAGA	AAACCGAACC	CTTACAGAAG	ATGCCAGAGG	180
GCAGAGTACC	CCCAGAGAGA	AACCTCTTCA	GTCTGATATAT	CTCTGTGAAA	ATGGCTTCCG	240
AGCTCCTCTT	TCAACTGTCA	GAAAAAGTGA	GCAAAGAGCA	CAATCATACA	AAAGAAAACA	300
CCATCCGGAC	CAATCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

GAATTCGGCC	TTCATGGCCT	AGAGCAACAT	AGTGAGACCT	CATCTCTACA	AAAAATAAAG	60
AGAAAATTAG	TTGGGGGTGG	TGGCGTGAC	CTATAGTCCC	AGCTACTCAG	GAGGTTGAGG	120
TGGGAGGATC	ACTTGAGCCC	AGGAGTTTGA	GGCTGCAGTG	AGCTGTGGTC	ATGCCACTGC	180
ACTCTAGCCT	GAGTGACAGA	GCAAGATCCT	GTCTCAAAAA	ATAAAGTAAA	ATAAAATAAT	240
CAGTCAACAA	CAGTGATTG	TCTTCAAGCT	GCCCTCCTCT	TCGGCTCTCA	AGGCAGTTTG	300
TGAAGTGTCT	AGGATAGGAA	TTTTCCAGAA	GGGCTTGCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GGAAGATGTG CCAAAGTTCA GAAACATAA TCTTATCTGA TCAGATTAAA GATCACAAC 60
CCAGTGAAGC CAGATTTTCT TCAAAGAATA TTAAGGATTT GCGATTAGCA TCAGATAATG 120
TAAGCATTGA TCAGTTTTTG AGAAAAAGAC ATGAACCTGA ATCTGTTAGT TCTGATGTGA 180
GCGAGCAAGG CAGTATTCAT TTGGAACCTC TGACTCCATC CGAGGTACTT GAGTATGAAG 240
CCACAGAGAT TCTTCAGAAA GGTAGTGGTG ATCCTTCAGC CAAGACTGAT GAAGTAGTGT 300
CTGATCAAAC AGATGACATT CCTGGAGGAA ATAACCCNA CACTCTCGAG 350

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT ACTCGCGGTC TGTTAGTAGT ATAGTGATGC CAGCAGCTAG 60
GACTGGGAGA GATAGGAGAA GTAGGACTGC TGTGATTAGG ACGGATCAGA CGAAGAGGGG 120
CGTTTGGTAT TGGGTTATGG CAGGGGGTTT TATATTGATA ATTGTTGTGA TGAAATTGAT 180
GGCCCCAAG ATAGAGGAGA CACCTGCTAG GTGTAAGGAG AAGATGGTTA GCTCTACGGA 240
GGCTCCAGGG TGGGATGAGC GGGCCAAGAT CGATGATCCC ACAGACTCCA AGCCTGAGGA 300
CTGGGACAAG CCCGAGCATA TCCCTGACCC TGATGCTAAG AAGCCCGAGG ACTGGGATGA 360
AGAGATGGAC GGAGAGTGGG AACCCCCAGT GATTGAGAAC CCTGAGTACA AGGGTGAGTG 420
GAAGCCCCGG CAGCGTCTCG AG 442

```

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GAATTCGGCC TTCATGGCCT ACAGAAAGTA AGTTGGAACC ATGTAAGAAA AAAAGACACA 60
AATAAACTA GGAAAGTGGC ATGGAGCTAG GCGTGAAGTT GCTGCTCAGT TTACATGTAT 120
GAAGTCTGT GTGGACTTAA GCTCCTACTT CAGTCATTTA TTGTATGACT TGGACAAGTT 180
GCCAAACATC TCTAATATTC ATTCATATTT GTAGGGTAAA AGGATGAGTA ATATGTATCT 240
TTAGTGATA AAACATTTAC AGACAACCTG AG 272

```

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

GAATTCGGCC TTCATGGCCT AAGACACCAG CGAGCCCAGG CAGGTAATGG AAGCAACTGT	60
AGCTGACTGG ACCTAAGAAG CAGTGGCAGC GGTGCCAGGC ACCCCAGCTG ACCTGCCTTG	120
GTGCTCAGAG CAGCAGGGCT GGCCATGGTC AGGGAGTCTG GGGAGGTCAT GCTCTGTCCA	180
CAGGGTTCTA GCCAGCTTCT GCCAAATTCT CTGTTTTTTC TCAAGAGAAG CTGGGAAGGC	240
CAGTTGTGGT GTCTCATACC TGCAATCATA GCACTATGGG AGGACTCGAG	290

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GAATTCGGCC TTCATGGCCT ATGAAAATTT GGAAGAAGAA TCCAATGAAA GTGGTAGCCC	60
TTTGTACCCT GTTTTGAAG TTGAACCTAA TCTCTAACGA TAACCCAGAG GAACATGTAC	120
TGAAGGTAAT TCCTGAGGAT GCTTCAGAAAT CTGAGGAGAA GCTAGACCAA AAAGAGGATG	180
GTTCAAATA CGAACTATT CATTGACTG AGGAACCAAC CAACTAATG CACAATGCAT	240
CTGATAGTGA GGTGACCAA GACGATGTTG TTGAGTGGAA AGACGGTGCT TCTCCATCTG	300
AGAGTGGGCC TGGATCCCAA CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC TTCATGGCCT ATGGCAATGG TGGTCGTGGT GCTGGGTGGG ATGNGGTCTT	60
CATCCTCTTC CTCCAGGAAG GATGCCTCTG GGATATGGCT GAAGGCCTCT GGGTGCAGCC	120
TGGCCAGTTT CCCTTTCAGC GTCCTGATAC GGCAGGAAGAT GATGTCCAGG TCCCGTTTCA	180
TCTCTACTAG GGTCTCGTG TGGTCAGGA AGCGTTCGCT CATCTGCTGC AGGCGGGCAT	240
TGGACAGGTT GTTGAAGTTG AGCAGCATCT CATTGGTCTT CTCAAAGCGG TCCAGCATGT	300
TCTTCTGGGA CAGGATGATG GCGTTGACAT CATCTGTGTT CACCATGCTC AGGATGCGGC	360
CGCAGAAGAC CCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 601 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC TTCATGGCCT ACATGACACC ACCTGAACGT CTCTTCTCC CAAGGGTGTG	60
TGGCACCACC CTACACCTCC TCCTTCTGGG GCTGTGCTG GTTCTGCTGC CTGGGGCCCA	120

```

GGGGCTCCCT GGTGTTGGCC TCACACCTTC AGCTGCCCAG ACTGCCCCTC AGCACCCCAA 180
GATGCATCTT GCCCACAGCA ACCTCAAACC TGCTGCTCAC CTCATTGGAG ACCCCAGCAA 240
GCAGAACTCA CTGCTCTGGA GAGCAAACAC GGACCGTGCC TTCCTCCAGG ATGGTTTCTC 300
CTTGAGCAAC AATTCTCTCC TGGTCCCCAC CAGTGGCATC TACTTCGTCT ACTCCCAGGT 360
GGTCTTCTCT GGGAAAGCCT ACTCTCCCAA GGCCACCTCC TCCCCACTCT ACCTGGCCCA 420
TGAGGTCCAG CTCTTCTCCT CCCAGTACCC CTTCCATGTG CCTCTCCTCA GCTCCAGAA 480
GATGGTGTAT CCAGGGCTGC AGGAACCCCTG GCTGCACTCG ATGTACCACG GGGCTGCGTT 540
CCAGCTCACC CAGGGAGACC AGCTATCCAC CCACACAGAT GGCATCCCCC ACGCACTCGA 600
G 601

```

(2) INFORMATION FOR SEQ ID NO:108:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```

GAATTCGGCC TTCATGGCCT ATTTTITTTT TTTTATCAA AAGTTTGTTC TATTTTCAAT 60
ACAAGATAAA TACCATGCTT GTTACTAGTG CAGTTCTCGA G 101

```

(2) INFORMATION FOR SEQ ID NO:109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG AGGCATGATG AAGACTCTGC TGCTGTTTGT 60
GGGGCTGCTG CTGACCTGGG AGAGTGGGCA GGTCCTGGGG GACCAGACGG TCTCAGACAA 120
TGAGCTCCAG GAAATGTCCA ATCAGGGAAG TAAGTACGTC AATAAGGAAA TTCAAAATGC 180
TGTCAACGGG GTGAAACAGA TAAAGACTCT CATAGAAAAA ACAAAACGAAG AGCGCAAGAC 240
ACTGCTCAGC AACCTAGAAG AAGCCAAGAA GAAGAAAGAG GATGCCCTAA ATGAGACCAG 300
GGAATCAGAG ACAAAGCTGA AGGAGCTCCC AGGAGTGTGC AATGAGACCA TGATGGCCCT 360
CTGGGAAGAG TGTAAGCCCT GCCTGAAACA GACCTGCATG AAGTTCTACG CACGCGTCTG 420
CAGAAGTGGC TCAGGCCTGG TTGGCCGCCA GCTTGAGGAG TTCCTGAACC AGAGCTCGCC 480
CTTCTACTTC TGGATGAATG GTGACACTCG AG 512

```

(2) INFORMATION FOR SEQ ID NO:110:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 485 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAATTCGGCC	TTCATGGCCT	AAATTATTAA	AGGTGACAGT	ACACAGGAAA	CATTACAATT	60
GAACAATGCC	TCAGCTATAC	ATTTACATCA	GATTATTGSG	TGCCTATTG	TTCATCATTT	120
CTCGTGTTC	AGGACAGAAT	CTGGATAGTA	TGCTTCATGG	CACTGGGATG	AAATCAGACT	180
CCGACCAGAA	AAAGTCAGAA	AATGGAGTAA	CCTTAGCACC	AGAGGATACC	TTGCCTTTTT	240
TAAAGTGCTA	TTGCTCAGGG	CACTGTCCAG	ATGATGCTAT	TAATAACACA	TGCATAACTA	300
ATGGACATTG	CTTTGCCATC	ATAGAAGAAG	ATGACCAGGG	AGAAACCACA	TTAGCTTCAG	360
GGTGTATGAA	ATATGAAGGA	TCTGATTTTC	AGTGCAAAGA	TTCTCCAAAA	GCCCAGCTAC	420
GCCGGACAAT	AGAATGTTGT	CGGACCAATT	TATGTAACCA	GTATTTGCAA	CCCACACCGC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCGGCC	TTCATGGCCT	ACACACATTG	TGAGCTGTAT	ACGTTAACCC	AAAGTCTGCA	60
TTCAAAGTGG	AATTATAACT	GGGCAGTGAA	TGAGTTGCTC	AGTCCATCTA	TTAACCATAC	120
TCTTTTAGGC	TTTTTATTGC	CTCTAATTGT	TGTAATAATT	AACATTTTCC	CAGGAAGTTG	180
TTTTACAGAA	GAAGGGGCCT	TAGCGGCTTT	CAACTCTTTA	GAGATAAGTT	CAACTTTGTG	240
GATTGACCAC	AGCACATCTT	GTTTAGTAGT	GAGCGGGAGC	CATATGAATC	CTCTAGAGAC	300
ACAGCCGTGT	CTGAGATGGA	CATTGCCAAC	ACAGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

TTCGGNCTTC	ATGGCCTACT	CTCATAAAAA	TATTCAAAGA	TCAACCCCAA	ACGTGCCTGC	60
ANTTTGGACA	ATGTNAGCTA	AAGCTATAAA	TGGAACAGCA	GTGGTCATGG	ATGATAAAGA	120
TCAATTATTT	CACCCAAATC	CAGAGTCTGA	TGTGAATGCT	ACACAGGGAG	AAAATCAGCC	180
AGATCTAGAG	GATCTGAAGA	TCAAAATAAT	GCTGGGAATC	TCGTTGANGA	CCCTCCTCCT	240
CTTTGTGGTC	CNTCTTGGCA	TTCTGTAGTG	CTACACTGTA	CAAACTGAGG	CATCTGAGTT	300
ATAAAAGTTG	TGAGAGTCAG	TACTCTGTCA	ACCCAGAGCT	GGCCACGATG	TCTTACTTTT	360
ATCCATCAGA	AGGTGTTTCA	GATACATCCT	TTTCCAAGAG	TGCAGAGAGC	AGCACATTTT	420
TGGGTACCAC	TTCTTCAGAT	ATGAGAAGAT	CAGGCACAAG	AACATCAGAA	TCTAAGATAA	480
TGACGGATAT	CATTTCCATA	GGCTCAGATA	ATGAGATGCA	TGAAACACTC	GAG	533

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC AAAGAGGCCT AGAAAATAGA AAATCAGGTA GCTATGTCAT TTTATAAGCA	60
TCAGTCCTCA CCAGATTTGT CAAGTGAAGA AAGTGAACA GAAAAGGAAA TTAAAAGGAA	120
AGCTGAAGTT AAGAAAACCA AAGCAGGAAA CACCAAAGAA GCAGTGGTTC ACCTGAGAAA	180
GAGCACAAGA AACACAAGTA ATATTCCAGT GATTTTGGAA CCTGAAACTG AAGAAAGTGA	240
AACAGAAAAG GAAATTAATA GGAAAGCTGA AGTTAAGAAA ACCAAAGCAG GAAACACCAA	300
AGAAGCAGTG GTTCACCTGA GAAAGAGCAC AAGAAACACC CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTCGGCC AAAGAGGCCT AGGCAGGTAT TCTTTGCTTT GGGAAATTCT TCTTCTGTGC	60
CTCCCTTCCC TCACTTTTTC CAAATTCTGG GCACAACAGC AGCTCTCTCT CTCTGTGGGC	120
AGGTGTGCAT CCTATTGGCT GGCTGGTATT TCTTGTTTT TTTCCCCCTT ATTCTTTTTA	180
AATGGGGGTG GGGGTATAAA AATATGTGTA TGGGGTACAT GCAATAATGT TGTAAATGTTT	240
CTTGTGTGTT AATGGATAAT TAATTGCAAA ATAATTGTTT TAATTATAAC ATGTTTGAGT	300
AAATGCTAAA TTAGTATTTT TTTCTAATAT AATAATGAAT TTGAAATCTA GCATTCTCTG	360
AACAATGTGT CTATGTTTGT CTGTCTGTGT CTGTCTAATA GTAATTAATA TCTGTGGTCC	420
GCACCCACTC GAG	433

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC AAAGAGGCCT AAGCAAAGCT TAGCTTACGG GGAAAAAAAA AAAAAAAAAA	60
AAGTAGAGCT TNCCTTGAAT CTGGAGAAAT TAAGCACACA GGTGTCCTGC AATATTAGTT	120
AAGAGACTAC TGCACCCATC ATACTGTAGC TTAAGACAGT TTCTTCTTTT AGTTTTTCT	180
AAAATGTCTC CATGTCTGTG TTATGCCACA AATAACACAG CCTTGGTTAA CTTTGGACT	240
AAAAAAAAATC AACTTATTGG CCAAGCATGG TGGCTTACAC CTATGATTGT AGCACTTTGG	300
ATAGGTCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```

GAATTCGGCC AAAGAGGCCT AATTTTCCTA ACTGTGTGCT GCCTTTTGGG TTAATTAGAA      60
TTGTAGCATT TCGTTTTGAT TATTTTTTTG GCTCTTTAGC TGTCTCTCA CATTTTTTAA      120
AATGGTAACT CTAGGGATTA TAATATGCAT CTTTAATTTA TCAAAGTCTG TTTTACTAC      180
TTCGTGTAAA ATAAACGAAC CTTGCATTTA TAGTTACATT TATTCCTCTC ATCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```

GAATTCGGCC AAAGAGGCCT ACTCAAAGT AGATGAGCAA TTGGTCAGAA TTGTTAGAGG      60
ATATTATTGG AGCTAAATGT TTCCTCTCTC TGTTTCAGTG GTGTATGTGC AAGTGTGTGT      120
ATATGTTTTT TGTGGGGAC AGTTTCAGGT AGATGGTATG AAGAGGCAGC AGGAGACTCT      180
CGAG                                          184

```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC TTCATGGCCT AATTTTCTAA AACCTGGAGA CAAACCACAT AAATACAAAA      60
CAAGTCTGCT TCTTCAAAT TCTGCTGGTG AGAACTCAGA TATCAGTGAT CTTATTAGCT      120
TTTTCAAG CCAGAACATA ATGGTGACGA TGATTAATGA CAGTGACTAT GTATCCGTGG      180
CTCCCATAG TCGGGCTTTA AATGTGATGC ATTCAGAAAA GGACTATGTT TTTGCAGCTG      240
TTTTCAACAG TACTATGGTT TATTCTTTAC CTATATTAGT GAATATCATT AGTAACTACT      300
ATCTTTATCA TTAAATGTG ACTGAAACCA TCCAGCTCGA G                               341

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTATGCT GTGCTGTTTT CCTGGACACT CAGAATCAAA CAGGCCTTCC ACCCATCCC      60
ATCATGTTGA ATTACAAAGT ATTTTGAGCA TCGTTTGGTT TGTTTCTTTC CACCCATACC      120
TGTGTAGGGC AGCGGTAGCA GTCTTCAACA ATGCATCCTC TTGGACAATG CATTGTAATA      180

```

TCTCTCTTC AAATTCTGTT TCACATAGTC ATTTCTCATG TTCTGTTGGA GACCCCCAAA 240
 AAATTCATTC CACACTGTCA TCCCTTTGTC CTAACCAGAA TCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC TTCATGGCCT AATGTATGGT AGACAATTTT TTTTAAGAC ACAGAGATAA 60
 ACGTTTTCCT GCTTTGGTTA CCTTTCCTTT CCCCTTTAAA AGGAATTAGC TATAGAAGTC 120
 CTTTGTAAG ATGCTTCTTG ATATTTTACT TTTGTTCTT TTCCCTAATC ATTCCCTTTT 180
 CACCCCACTC CTCGAG 196

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC TTCATGGCCT AGTGATTGGG TGCAGAGGAA ACAGGAACCA GAGAAGGGTC 60
 ATCTCAGCTG CCTGTCCCAC TCCCTATGCT TGGTGTACC TGCGCCATAG TCTCGAG 117

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCGGCC TTCATGGCCT AGTAAGTGCT CTGAGTATAT TAGGAAAAGG AAATCTTATA 60
 CATAAAAATC AAAGCTGTTG CTAATTTTTC CACTAGTGAG TCAGTCTATT AACATTACTC 120
 ATGGTAGGTT TTGCCATACA GAATTTTAAT TTTTATATAT TATTTTGGC TTTGTTATTA 180
 TGCTTAGAAG TCCATGGGGA CCCAAAGATC AGAAAAGATT CATCTGTACT CGAG 234

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCGGCC	TTCATGGCCT	ACGGAACGAA	CATTGGCTCG	GCGGTGGTGA	TGCTAATTCC	60
CACTGTCATG	TTCACAGTGA	TGGCCGTCTT	TTCCTTCATC	GCCCTCAGCA	TGGTTCATAA	120
ATTTTACCGG	GGAAGTGGGG	GGAGTTTCAG	CAAAGCTCAG	GAGGAGTGGG	CCACAGGGGC	180
CTGGAAGAAT	CCACATGTGC	AGCAGGCAGC	CCAGAACGCA	GCCATGGGGG	CAGCCCAGGG	240
TGCCATGAAT	CAGCCAAGAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTTGCCA	CACCATGAAG	CTCTGTGGC	AGGTAAGTGT	GCACCACCAC	ACCTGGAATG	60
CCATCCTGCT	CCCGTTCGTC	TACCTCACGG	CGCAAGTGTG	GATTCTGTGT	GCAGCCATCG	120
CTGCTGCCGC	CTCAGCCGGG	CCCCAGAACT	GCCCTCCCGT	CTGCTCGTGC	AGTAACCACT	180
TCAGCAAGGT	GGTGTGCACG	CGCCGGGGCC	TCTCCGAGGT	CCCGCAGGGT	ATTCCCTCGA	240
ACACCCGGTT	CCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC	TTCATGGCCT	AGGAAAGATT	CGTGTTTTAC	TTTAATAAAC	CTGAAAGAAC	60
TGTCGTTTTT	CACTGCCTAT	AGGACCACTA	CAAAGCCGCA	AAGAAAAATT	AGACTTGTTT	120
CATTTTATAA	CAACAACAAC	TGCTACTACT	GCTACTAGTT	AGATACCGTT	TGCTCATTTA	180
TAACAATCTC	AGTTGGTAGG	ATGAAGCTTA	AACACTTGGC	ATTCATCGTC	TTTTTCAGTC	240
CTCTCGAG						248

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

```

GAATTCGGCC TTCATGGCCT ACTGTCTTTT CATGCAGATT TCATATTGTC TTGTCTCTTT      60
TCATTGCTTC TTGACCTTCC TGGCAGGTGT CGCTCAGTTT CTTCCTGTTT CCGTTCCTGT      120
CCTCTCCACA CCTGCTATCC CGTCCCACTC CCATCTACCT CCCGGGAAGC CAGCCCTGCA      180
TGCTGAGTTT GTGACCTGCT TCATTCCCAT TTCATTTCTA GAGGGTTTAG AGGTGACCTG      240
GAACCGTTCC CTTTCCCTCT CCTACCCCTT CCTCTGCAAC ACCAAGAGGC CTGGAGGGGC      300
AGACAGAAAG CAGCCAGCCA CGGCGGAAG TCTCGAG                                337

```

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AACTTATTTT TTTTGTIGAT TGCTGTCTT TCTTTTCTT      60
TCCTTCCCTC CCTCCCTCCT TCCCTTCCTT CCTTCCTTCT GTAGAGATGA GGTTCACCA      120
TGTGGCCAGG TTGGTCCTGA GCTTAAGTGG TCCTCGCACC TCAGCCTGGC AAACCTGCTGG      180
GATTACAGGT GTGGGCCATC ACGCCTGGCC TTACAGTAAA TTCTTGATAA ACAACCCAGC      240
AACACACCTC GAG                                253

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC TTCATGGCCT AGGACGGGGG ACTCAGGTTT TAACTGGAA CCTGGGGTCA      60
TGTATCATGT ACCAGGTGGG GAGAAGTGTA GCAAATCTCA GTGCCAATTT GAGGGGAAGC      120
CAGTCATTCC AGGAGAAGAG CTCGAGGGGA AGAGCTGTTG ACTTTCATAA TGCAGTCTTA      180
ATTATCCAGT CACCTCTCTG CCACATGGCA GAAGCCAGGT GGCAGTGATG GTGGTGGGGG      240
AAACAAAACA CACAGTCTCT GGCAAGCCCC ACCGGGAAAG GAGGGCTCAG AAGGCGTAGC      300
GGGTCCGGAT ATCCTCGAG                                319

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT ACAATAAAAG CCCATAGGGA AGAGAGAGAG GATATAGGGA      60
AACAGAATCA GATGTGTAAT ATACTTGGCA CAGCGAAAAA ATGGATTAA AAGACAAAAA      120
TGGAGGTCCA GGTAGATGTA ATTCACACAG ACTGAAAGTG AGTTCGGGCT TGTGTAATAAC      180

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ACATGAGATT GGATTGACC CTTGGCTCT CAAGTGTCCT CTTAGATCTA GAACTGCTCC 240
 TTGGTGGCCA TTAGATCGAG TCAGTTTGA TCTGCATCAC TTAGTTATTG GGAATTTCTT 300
 TGTTGGAAAC AGGAAAATTT TTTTAGATTA TTTGGCGTAC GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

GAATTCGGCC TTCATGGCCT AGGCACAGTG AAACCCGTGG AAATTCAAAG GTGAGCAGGA 60
 CAGTGGGTCC TGTATCTTGA TCTTTACGGA TCTTTCTCTT CTTGAATCCT CACAGCACCC 120
 ATTTTATAGA CAGGAAGACT GAGGCCCGAA AGTTCTGTCT GACTCTGAGC CTGGCCTCTT 180
 TGCTGCCTCC CGTTGTCTGT TGAGGCTGTG TGGTCACAGC ACCCAGGACT TGAGAGGAGT 240
 GAAGTTCTTC CTCACCCCGC AAAGGCTTCA TGAGCCCTAC TGTGTGCCAG GCCAGCCCTG 300
 CTCAGTCTGG GCGGATAAAC ACAGGGCAGA TTCTGAAAGC CTGTGTGAGG GAAGTTCTAG 360
 GCCTGCAGGA GCTGAGAGGA GACCTGGAG AGGAAGGGAG TCAGGGCCAG CTTCTCGAG 420

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC TTCATGCCTA AGCTGATGGA GACTGTAAAT GAACCAGAAA CAGGTGAAGT 60
 GAGCAAAGAT GCAGTCATTG TAAAGCAGGA GAAAAATAAT GAATATTGCC TTCAGGATAT 120
 TGATGATAAA TTGTCAGAAAT CAGCAGAGGA TGATGGTGAA GATGATACCA ATGATGAAGA 180
 TGATGATGAA GATAGTAACC CTAAAAAGAA TACTCAGGCC CCACTAGAGT TAATGGCAGA 240
 ATTTCTGAGA GCAGAAATGG CCCGAGAGTA CCAGCTGGCA AAAAAATTAT GTCAGATGAT 300
 CCTAATCTAT GAACCAGAAA ATCCTGAGGC CAAGGAGTTT TTCACACTTA TTGAAGAAAT 360
 GTTGCTGATG GAGAAAATC AGAATCATGA GCAAGACGGT GAAAACAGTG ATGAAGACAG 420
 CAGCGGGCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

GAATTCGGCC TTCATGGTCT AAAAAATCAA CTGCAAGCAG CCATCATCAG TTGGAAGAA 60
 GCTTTGGGAA GCCTTCAAAG AAAAACCTCG GTATCCACCA AGTCAGGCTC AAGCAGCTCT 120

TCAAGACAGT CCCCTGAAG AGTACTCCTA TAAGAAATCA ATAAGAAACC TGTTTAAAAA 180
 CATTCTTTT GTCCTTCTGT TGATCACTTA TGGTATCATG ACTGGTGCCT TTTATTCAGT 240
 CTCACGTTA TTAAATCAA TGATAATTGAC ACAACTCGAG 280

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC TTCATGGCCT ACGCGAGCGG CAGGTGTGCA CAGGAGGTTT TCCACTTTGT 60
 NCTCTGAAC CGCGGTCAGG ATGGTTTCT CTGTCAGGCA GTGTGGCCAT GTTGGCAGAA 120
 CTGAAGAAGT TTTACTGACG TTCAAGATAT TCCTTGTCAT CATTGTCTT CATGTCGTTT 180
 TGGTAACATC CCTGGAAGAA GATACTGATA ATTCCAGTTT GTCACCACCA CCTGCTAAAT 240
 TATCTGTTGT CAGTTTGGCC CCCTCCTCCA ATGGTACTCC AGAGGTTGAA ACAACAAGCC 300
 TCAATGATGT TACTTTAAGC TTACTCCCTT CAAACGAAAC AGAAAAAAT AAAATCACTA 360
 TAGTAAAAAC CTTCAATGCA TCAGGCGTCA ATCTCGAG 398

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC TTCATGGCCT AGGGCGATGG TGGGCAGAGG ATCCTTAGTG CTCAGTCGGG 60
 CTCCACCAGA ACCACGGACT TGAAGGAGAA GAGACTCTCG GTTCCAGGTA GCAGAAAACG 120
 TGGAGTTTGT GACACAGATC CTCCTGGCCA GAGAAGGATG CTTGAGAATC TGAGATTTAC 180
 ACAGCTGTAT TAGGTTGTCC ACGATGACCG GGCAGTAGGT CTCTCTCTTG GGGATTTCCT 240
 CAGTGGTCTG CCAGAGACGG GCGTGAGAGA TCACATTCAG AACGCACTCG TCTTGGTTCT 300
 CTATGTGGTT CCTTGGATCA TCAACAAGGC TAAGCACTTT CTCGGGAAGG CCTTCTATTA 360
 ACTTGGTCTT GGTGAGCCAG AGGGCCTGCT TTACACCCTC GAG 403

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC TTCATGGCCT ACTCCATTTT TCGAATGGCT TATTTAGGCC CAGCTCTTGC 60
 GTTTGCAATG TCCCTTCAGG CCCAGAACTT TCTCACGTCA TCGTCACCAG GCCTAGCTTC 120
 TGCATCTGGT CAGCCTTTTA AGGCCAGCT TTTGCCTCAT AAACTCAGCT CCTGTTTAAT 180

GGCGGCCTCC CGGGTCCCAC TCGAG

205

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT AGTTTATTA CTTGGTTAA GACATCAGTT ATTTAGTCT 60
TTGATAATTC ATTATCTAGA TAATGGTTAC TTTGATTGT CTGTTTCTCG AG 112

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC AAAGAGGCCT ACACAGAGCC CTTCACTACT TTTAATTCTT CTTAAATTGG 60
TGGTTCATGT TAATTAAATT ATTATTATTT TTTTGTGAGA CGGAACCTCGA G 111

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC AAAGAGGCCT AAAGATGTTT TCCATGAGGA TCGTCTGCCT GGTCTAAGT 60
GTGGTGGGCA CAGCATGGAC TGCAGATAGT GGTGAAGGTG ACTTTCTAGC TGAAGGAGGA 120
GGCGTGCGTG GCCCAAGGGT TGTGGAAAGA CATCAATCTG CCTGCAAAGA TTCAGACTGG 180
CCCTTCTGCT CTGATGAAGA CTGGAACCTAC AAATGCCCTT CTGGCTGCAG GATGAAAGGG 240
TTGATTGATG AAGTCAATCA AGATTTTACA AACAGAATAA ATAAGCTCAA AAATTCACTA 300
TTTGAATATC AGAAGAATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC AAAGAGGCCT AGGTCCAGAA ACATTTAAAA AAAAAAAAAA GGGGGCTTGA	60
GAAAAGGGCT TCCAGTGCCA GGCAGAAATA TGTTTTCTT AATAGGGC	108

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

GAATTCGGCC AAAGAGGCCT ATGAAAACGT GGATTGCTT TGTAACCTG AGAATACATT	60
TTGTTGCCAA CAAAAGAGA GAAGAGAAGA GGAAGATATT GAAGAGAAGA AATCGATTAA	120
GAAAAAATT AAAGAACTTA AGTTTTAGA TTCTAAAATT GCCCAGAACC TTTGTAAGTA	180
TCATATTCCA ATACCATTCA AAGACAGTGG AAATATTCTT TTAAATGATT TCATTTCTT	240
TAAGACCGAT TATTCAATTAT TTGCTATTTT CATTTTGTTA TTATATGCAT GATAAATTCA	300
CAGATACTCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC AAAGAGGCCT AGGGTAAGAC TAGAGTGTGTT TAAATCATCA ATAAAAAGTG	60
GAGAAAACAA AGGTTATTCA GCGATTGAAT TCTAGACCTG CCTCGAGCCC TGCCTTTCCT	120
TTACTTTTAC TTTTTTTTTT TTTTCTTTG GAAGAGAGAA GAACAGAGTG TTCGATTNTG	180
CCCTATTAT GTTINTANTC GGGAACAAAC GTTGGTTGTG TGTGTGTGTG TTTTCTGTG	240
TTGGTTTTTT AAAGAAATGG GNAGAAGAAA AAAAAAATTC TCCGCCCTT TCCTCGATCT	300
CGCTCCCCC TTCGTTCTT TCGACCGTC CCCCCTCAAC CTGCCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GAATTCGGCC AAAGAGGCCT AGAGAGTCTG GATGACAAGC AAAGCTCAAT CTCAAACAA	60
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TAATTTTAA AGTAATGATT ATCTTAACCA TTCTTAAATC CTTCTGTCTA GTAGGAATCT 120
TATTCATGGG AGTGTCTGGA AAAGGGACAA AGAGCGGCTA TCTCGAG 167

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC AAAGAGGCCT AGTGTTCAC AAAAGAATTG GAAACCATAG TCCTGAACTC 60
TCCCTAAGTA GTATAAGCTT TAAATAGCAC TCAATCCATA TTAAGTCTTC TTAGTGTAGC 120
ATGGTTGCTC TCATGCGTCT TTCTTATGTT TTAAATGGTG TAAATTTTAG TCGTTTGTC 180
TTCAGAAAGTG GCTTTGCAAA TACAAAATAT CTCGAG 216

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

TAATCTTTAC TGGTGAAAAG GATGGAAAAA TAAATCAACA AATGCAACCA GTTTGTGAGA 60
AAAAAAAAAA AAAAAAANC CGAAAAAAA AAAAAAACA CCTGAATGCG GAAGAGCTCG 120
GCTCCCGTTT AGCATTGTTT ACTTAAGGAA ATAAAAAACC AACAAAGGAT CTCACATTTT 180
CTTAAAAAGT GAAGATTGCT GTATACTATT TATTCAACTT ATAATTTATG TTAATCCTTG 240
ATCTTTGTCT TTTGTCATGA CAAAGCATTT ATTTAATAAA GTTATGCATT CAGTTCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGTCTCTGTT AATCCTACTC TGCTTTAGCC AGAATAGCCT 60
AGTATTTTAT TTCTATTTTA TATATTGAGA TTTCTTCTAA CATTCCTTT GATAAAATC 120
TTCTGCTTTT TGAAAAGTGG TATGTATCAT ATTTTATGT TTCGGTGTG TCTCGAG 177

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC AAAGAGNCGT AGGGAAAGAT TTCAGCTATT AATCAACTGG AGGAAATTCA	60
AAGCCAGCTG GCTTCTCGGG AAATGGATGT CACAAAGGTG TGTGGAGAAA TGCGCTATCA	120
GCTGAATAAA ACCAACATGG AGAAGGATGA GGCAGAAAAG GAGCACAGAG AGTTCAGAGC	180
AAAACTAAC AGGGATNTTG AAATTAAGA TCAGGAAATA GAGAAATTGA GAATAGAACT	240
GGATGAAAGC AAACAACACT TGGAACAGGA GCAGCAGAAG GCANCCCTGG CCAGAGAGGA	300
GATTCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

GGTGGCCTTG GGTCAAGATT CGCACCATGG TGGGCACAAA CCCAGGAGAA CACTTTCCTG	60
TAAACGTGTT TTCATGCTGG AGCCAAGGT TTAGCTGGG TTTGGATTTT TATTTATTTA	120
TTTATTATTA TTATTACCAG GTTGCACTTA AAGGATGTTT TGGAGGAGCA CAGAGTTTGT	180
CTGGTGAGGG TAGGCTCTGG GCAGATTTT CTGTGAGTCT CCCCTGCCTG CGGCATCAGG	240
ATCATCCCTG GTGCCCTGTG GTGGCACCAG GTGGCTGCCC ACCCACAGGC GTGGCCTTCA	300
CAGTGGGGGC CATCTCAGCC TGGGGTAGCG ATCTGCCTCC GACCTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

GGCCTGCATC GCAACAGCCA GGAGGGCCAG GCCACCCAG GCAGGAGGCA GTGGGCTGGC	60
AGCCACCCTG GGCACAGAAG AGCAGACGCA GACAGTGCTG GGCAACGAGG GGCTTCTTC	120
ATGGGCCCCG CTGCCCTGTC CCTCCCCCA GGTCCCCACC TTCTAGGGTT AAAGTGCAGC	180
TGGGAGGGAG GAGGCAGGCA GAATTGGGGA GCTAGAGAGA GCCCAAGTGA ACCCTGACTG	240
TCCACGCAAG TCCATGTCC TCCTCGTCCT GGAGTTCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGTTCCTT	TTGTTATTTT	CCTGCATCTT	60
ACAACGTAA	GGCCTTGGTC	CCTGCTAATA	ATAAAATAAT	AATCAACTTT	ATAAAGAGCT	120
TACAATATGC	CAGATACTGT	ACTAAGTGCT	TTATATTTTT	TTTTTGGGTG	GGGGGTGGCT	180
GTTGGGCAGT	GTCTCGCTCT	GTACCCAGG	CTGGAGGGCA	GTGGCACAGT	CATGGCTCAC	240
TGCGGCCTTG	ACCTCCTGGG	CTCAGGCCTC	CCGCCTCAGC	CTCCAGGTG	GCTGGGGCTA	300
CGGGCGTGCA	ACATTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

GAATTCGGCC	TTCATGGCCT	ACGTAATTCT	GGAAAAGTGA	ATACTTGTGA	AGAGTCGTCT	60
TGAATGATTT	GTAAAAAATC	CTGTTCTTAT	ATTCACGAG	TTTCGAATCT	TTGTCAGAGG	120
AGTATTACCA	TTAGATTGAA	AAAAAGGAAA	ATAAATAATA	AACACTTTTA	AAAAAACTCC	180
CCATTCTCTT	ATTCTCACTT	TTAGGAAAAG	AGACTGACTA	ATATCTTCTG	CCACAAATAC	240
CGATGTTCTT	AAAAATATTT	ATGGGACTGC	TTTTGGCAAC	CAGCCCTATT	TTGTTTTCAT	300
ATCCCTTTTT	GCTCCCATCT	TTCCAAACTC	ATAAACTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

GAATTCGGCC	TTCATGGCCT	ACTCGCCTCT	ACTAAAAATA	CAAAAATTAG	CCAGGCACGC	60
GCCAGGTGGT	GCGCACCTGT	AATCCCAGCT	ACTAGGGAGA	CTGAGGCGGG	AGAATTGCTT	120
GAACCTGAGA	GGTAGAGGTT	GCACATAGCG	CCACTGCGCT	CCAGCCTGGG	CAACAAGAGT	180
GAGACTCTGT	CTCAAAAAAA	TATATAAATA	AATAAATGAA	AAAAAATAAT	TGTATAACAT	240
CTATACTATA	GCCTCGTAAG	CATTAGCTAC	TTAATATTTT	TGGTATATTT	AATAATTTTA	300
ATACAGCATT	TTTGATTACT	AGTGAACATG	AATATTTTCC	CATATTTGTT	AATTATACTT	360
TCCTCTTACA	GAAATTCTGT	TTGTGTCCTT	CACCCTTCAC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC TTCAGGGCTC CTTCTTCCTA GGCTAGTATT TATCCCACTA CATCTGACTC	60
ATTCTCTACT ATCGCTGTTG ATTCCTCTT GGGTACTAAA TCTGTTGAAC ATGTTGCCAG	120
GCTTACTGCT GGTATTATGG GATAGCATTT GCCTGATGGC AGCTTCTAAA GGAGACTCCG	180
ATGGCACTAA GCAGTTTCCA AAAGTTTATC TTGCAAGTTC AACCCAATTC GAG	233

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCCTAGA CCTGCCTCGA GATGTTTTTT TCGTTATTTG AAATCTTTGC TCTTTTATTT	60
TTCAGCTCCC AGATCCTCTC CCTCTCTTTA GCTTTCAC TGTTTGATAT CAAGAATATG	120
AAATGTGAAT TCCACGGACT CGAG	144

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCC TTCATGGCCT AGGCAGGAAG GAGGCTGGAA TAAATAAAAA TAAAAATAGA	60
CAAGTAAGAC AGCATAAATA ATACATTTTT AAACATGTCA ACATTGATAA TACAATGAAG	120
ATTTACCATA AAAAGTATCA TATCTAACCA AGATATGCAA AAGATGCATT CAGTAAGCTG	180
TAACGTTGAG AAATGTAACT GTGAAATCAG CTCACCACTT CAAGTCACTA GGTTCGCCAC	240
TTGGACCGTC TTGGTTTCAG CGAGCATAGC GAGTGGCTGT AAGAAATTGT CCATGCCACC	300
AATTCCTGCTG TACTTGCCC AGGTGGTCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC TTCATGGCCT AGGAAGTGA GGAAGCTGG GTGCTGCTG GAAGGGAGGG	60
AGGCTGACTC TCTACCCCTC ACCTCTGCAA GGAAGTGAAG CCTGTAGGGT TCGGGCTGTC	120
ACTGGCTACA GCGGCATCT TTCTGTAAAA AGCTTTTCAG GCATGAAACC CATTTCTGTA	180
TGGACTGGGC TGTGTTGACG GTGGTGCTTG GGCCTTGTGT GCCAGGCCTC TCTGGGTCCC	240

CTCCCTGGCC TTGCCTTCC TCTCACCTTC TCGAG

275

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC TTCATGGCCT AGAGTCATAG GTCAGACCAC TTTCTAGGAG CTGTTTCAGTG 60
 ATAAAATTAA TAACAGTGAC TTTTGAGTCA AAATAGATTT TTAAAGTACT TGATTTTCTC 120
 TTTGATTTGG AACATCTTT GTTTAGCTTA ATTGAAATGA TCTAAATAT TTGAAGGATT 180
 TTATACTTTA CACAGAGGCA TGTATTGGA TAATTAGCTT TTATTAAACC CAGGCTTCCT 240
 CGAG 244

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GCGATTGAAT TCTAGACCTG CCTGAACCCC ACCCTTCACG TCCTACTTGG GCTGCCAAAG 60
 TCATCTTCCC AAAACATGAC TTTTCCTCAG TCCTTTTCT TATTAGATT TATCATATTC 120
 CACATCCCTT CCCTGGCCCT CAAGGGTGCC TGTAACCTAG AACCATCTTA CCTTCCACC 180
 CTTGTTTCCA AACCTTCGCG TTTACTTAGA CATGCCTTCC CATTTCCCTC CCGACCCACC 240
 CCCCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC TTCATGGCCT AGAAAAAAC AAGTAGTTTG GCAAGGAGAG CAGAAAAATA 60
 AAATTCCACT GTGTAGGCAT TTGGAGATT AGCAAGAGCA ACCTAGAGTC TGCCCCCAGA 120
 GACACTGCAC GTTGTCTCTG ACACAGAGGA TGCCTAATT CTATTTCCTG TGCCACCTGA 180
 AAAAAATCATA ATTTGAGAAG AGAACTGTT AGGCCATTTC TAGTGAACATA TTTTCCAAA 240
 CCCTCACGGA ACCCTGAACA GGGCGTGTCT CGAG 274

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

```
GAATTCGGCC TTCATGGCCT AAGCTTGCTC ACTCTTCTGT GTGTTTGAAA TAATGGTAAA      60
ATACAATAAT ATTGTCAAGC ACAGTGGATC GGAGATTTTT CTTCTCAGGA CTATTCTGCT      120
TATAGGTCTA CTTCTATAG CTATTGTCA TTGTCTCTCT GGTCTTCTC TTTTCTTCTC      180
TCCTGTGCTA GATGCTCTCT CTTCTATCC CTCCTCTCT TCCCACCCCT ACCTCCCACT      240
TCTCTGTTTA TATCTGATT TTGGTGAAC ACATCCTCCA GGCTCCCTGG CACTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

```
ATGGCCTAAG GTGCCCAGC TTGCCAATTA ATTCCCAGTA GAAATTTTAA AATGTTAAAG      60
ACAGTAATTA AAAAAAAAAA AAAACCACAC TGTTTTGACA TTTTACCTCG TGCTTTGTGT      120
GTGACTAGAT TATGCACTAG AATTTTCATC AGTATTCTTC CAAATAAGTT ATTTCCCAAG      180
TGTTGCTGG TATCTAACCA ANTANTCAAT AAAGTATTCT TGCTAAGTNG GCCATGAAG      239
```

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

```
GAATTCGGCC TTCATGGCCT AATATCATGA TCACTGAAAT TACATCTAGT GAAACACACA      60
CGTGCTTATC TGCACGTGTG TGTAAGTTAG AAAGAAAAAA CAAAGGCCTA ACAGTGATTG      120
TCTTAGGTTG ATAGGATAGT GGGTGGGATT TGCAGAATTT TTGTATCTGC AGAATTTTGT      180
CAAAGTGCCC ATTAGTTTTG TAAAGAAAAA AACCTAAATG TATACTTCT AAAGAGATAA      240
TTTTTCTTT CATGTTTTTG CTACCTATAT CTAGGAAAAT AACTTAGAAT TGTAATTATT      300
TTGAAGCTCT GGAATTATTA TGTCAAAAAA TTACAGAACC AAAAAGTCTC GAG      353
```

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```

GAATTCGGCC TTCATGGCCT ACTTGCTGTG GCTGACTCGG TTATTGACTT TACTTCTTTT      60
CTTTTCAGGT TTTTATGGGA CTGTTTCTAG CCCTGATTCA GGTGTGTATG AAATGAAGAT      120
TGGCTCCATC ATCTTCCAGG TGGCTTCTGG AGATATCACG AAAGAAGAGG CAGATGTGAT      180
TGTAATTC AATCAAACT CATTCAATCT CAAAGCAGGG GTCTCCAAAG CAATTTTAGA      240
ATGTGCTGGA CAAATGTAG AAAGGGAATG TTCTCAGCAA GCTCAGCAGC GCAAAAATGA      300
TTATATAATC ACCGGAGGTG GATTTTGTAG GTGCAAGAAT ATCATTTCATG TAATTGGTGG      360
AAATGATGTC AAGAGTTCAG TTTCTCTGT TTTGCAGGAG TGTGAAAAAA AAAATTACTC      420
ATCCATTGTC CTCCAGCCA TTGGGACAGG AAATGCCAAA CAACTCGAG      469

```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```

GATTTATTCA TTCTTGATTA AATGCACTGA AAAGTAAAGG GTCTGTTTGT GTCATGTTCA      60
TGAAATGCG GTTAGAGAGG TGCTATTCAA GTGATTCTGA AGGCACCCCA AGGTATATCT      120
GTAATTAA GATTACTGCA AATATCTTTA CTTTACTGTG GGTTTTGTAGT ACATCTGTTA      180
ATTTAGTGT TCTTTGTGTG TTTGTAGAC TAGTGTCTT CCATCCTTCA ACTGAGCTCG      240
AG                                     242

```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```

GAATTCGGCC TTCATGGCCT AGCATTTTTT TTCTTTAAAT TATTGTATCC ACTAGTTCTT      60
GCCAGTATAA AGGAATACAA TTGACTTTTG TGTGTTTCAT ACGCTACAAC CTTTCTAAAT      120
TCACTTATCA GGTCCAGAAC TCTTCTACTA ACAATGCACT TTTATAAAGC CCTAACACCT      180
CTCCTGATCT CTGTCTCACC CTCCACCTA TCTCACTGTG GGATGGGAAG GAAGTCAATG      240
GAAACACAG GAGCGCATT TAATAATAGC CCATATGTA TACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC TTCATGGCCT AGCTCGATCC AAGAAGAAAA ATTAAATGA CAGCTTTTCC      60
CATTGATATA ATCATCTTAC TTGCTCTCT ACAAGAAATA TGCATTAGGA ACCTTCATTA      120
TAGGTCCACA GAAATAGCAG AACACAAAAG CGCCCCCTA CCCCCCGCC CCGGTAACCA      180
GAAATACACA GAGGCAGAG                                     199

```

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

```

GAATTCGGCC TCATGGCCTA GAATTAACCA ATTAAGAATT AATAAATTAC TTATAAAATT      60
AAAAATCAGG AATACCAGGC TTAATGCATT CATTATTCTT ATTTAGCAAA CTTTTTTTTT      120
TTTTTTGAAT GCCACAATG TCCTAGGTTT TGGAAATACA AAATTACTTG GTACCAGTAA      180
CTCGACTGTC ACCTTTCCAG CCATGGACTT GGTTCAGACA AACCCCCAGT CCACGGTTGT      240
CGTCCACTTG CAGTGCCCGC CGACTGTGGA TATATGCTGG GGATCCCAAC ACAACGCAGC      300
TACTCTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

```

GAATTCGGCC TTCATGGCCT AGTAAATATT TTCTTCTACT TTGTGTTTGG CCTTTTGTG      60
TTCTCAGCAT TATTTTTTGA AGACAAAAG ATTGATTTTG AAGAAGTCTA ATTTATCAGG      120
TTTTTTCTAG TAGTTTGTAG CGGATTNTG CATGCTGCTT TAAAAAAAT CTTTGCTAAC      180
CCTCGAG                                     187

```

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```

GAATTCTAGA CCTGCCTCGA GCCTTGCCCA GAATCAGCAA GTAACTGCA CTAATTTGTC      60
TTATATTGA CTTTCTAACA CTGATTTTTC TGATTTTCC CTGTCGACC CTCCAATTGA      120
TAAAAATGTG TATAATTGTT CTGCTGCTTC TGCTTTGGCC TGCTTTGGCT GCTGCATATA      180

```

CAGGTGAAGA TCTGGAAAGA AATGATGGAT CTACAGAAAA ACCCTACTTC GTAACCCCTA 240
ACCTGCATGG AATTCTGATC AAGAAGCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC TTCATGGCCT AGTTTCACAT TGTCTGTACT GTGTTGTGCA GTACCAGAAG 60
TTGCTGGTAG CTAATTGGTC TTCTGGGACC TGCCATTGCA GACGTGGTGA TTGTAATCTT 120
AATCTTGTTG AAACAGGATG GATTATGAC TGGGATGGCC GGAAGCCACA CCAGACACCC 180
AGTCACCTGG TCATGGGAGA GGTACTTTGT TGGCTTTTCA TAGTACTTAA CACTGTGAGC 240
TGCTTCCTGA AGTGGCACTC TTAAGGCCAG GTGCCCCCAC CCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC TTCATGGCCT AAGACAGACA TTTTGGCAG AGCATAGATG AAAATGGCAA 60
GTTCCTGGC TTTCCTTCTG CTCAACTTTC ATGTCTCCCT CCTCTTGGTC CAGCTGCTCA 120
CTCCTTGCTC AGCTCAGTTT TCTGTGCTTG GACCCCTCTG GCCCATCCTG GCCATGGTGG 180
GTGAAGACGC TGATCTGCCC TGTCACCTGT TCCCGACCAT GAGTGCAGAG ACCATGGAGC 240
TGAAGTGGGT AAGTTCAGC CTAAGGCAGG TGGTGAATGT GTATGCAGAT GGAAAGGAAG 300
TGGAAGACCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGCCT TCATGGCCTA CACCAAGTTG AATCCCTATG CAGGAGGAGA CGGCCTTCAG 60
AACCACTGT CCCCCAAGAC AAAGGGCACT CCTGTGCACC TGGGCACCAT CGTGGGCATC 120
GTGCTGGCAG TCCTCCTCGT GCGGCCCATC ATCCTGGCTG GAATTTACAT CAATGGCCAC 180
CCCACATCCC TCGAG 195

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```

GAATTCGGCC TTCATGGCCT ACACTCCTGG TCATTTTGCA TTTTATCCAG CTTTTTTTCA      60
TCAACCATGT TATCCTGACA GACACATTTA TTGGATATTT AGTTGGAAAT ACCTTATGGT      120
TGGTTGCAGT TGGCTATTAT ATCTATGTAA CTTTCCTGGG ATACAGTGCA TTGCCATTTT      180
TGAAAAATAC AGTAATTCTT CTGTATCCAT TTGCACCTCT GATTCTGCTC AACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```

GAATTCGGCC TTCATGGCCT AGGCTAACGT AATTGAGAAA ACCAAATGAA ATATATCTTG      60
ACCAATAATT TAAACCATA TCAGAGATTC AGTTTGGTTC TGTCTTCTGC TTTACTGATT      120
TTAGGATCAG CCTCATACAA AAGGTAATG GTGGCAGCAG CTCCAGAACT CATATCATAT      180
CCTCCCATGT TAAAGTCAA TGAGAAAAGT CTGTCTTCGC CCCAGGATCT CGAG      234

```

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTCC ATTGTTAAGC AAGGAAAAAC AAACAATACA      60
TTGAATTTGA CAACCCACTG AAGTTGCAGA TAATGAGGAC TTACCATTGT ATACCATTAT      120
TCATCTGGAC CTATATGTTT CATACAGTTG ACACCATCCT ATTACAAGAA AAACCTAACA      180
GTTATTTATC AAGCAAAAAG ATAGTGGGTC TGACAAAAGA TGACGGTAAAT ATGCTACGTC      240
ACACCCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

```

GAATTCGGCC TTCATGGCCT AAACCACTGC GCACCATATT TCTTAAGGAT GTTCTGAAGA      60
CCCATGAATG TCTGGTCAAG TCTGCTGATC TCTTAATGAG GGACAACCTG TTGAAATAA      120
TAACAAGCTC CAGGACATTC TACGTACAGG CAGACAGTCC AGAAGACATG CACAGCTGGA      180
TTAAGGAGAT TGGCGCAGCT GTCCAGGCCC TCAAGTGCCA CTAGGCCATG AAGGCCGAA      239

```

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

```

GAAAACCCCA GATATTCCTT ATTATGGAAG AAGAAGCAGG AAATATGTTT TTGAATAATG      60
TGGGTCAGAG AATTGTGCAT TTATTATTGC TAGGATGCAT ATACACATTG AACTCAGTCA      120
ACTTACTCTC TCTAAATTAT CTCACCGGTG GAGACATTGC CTCAGGAGTC GAGCCCTGTG      180
GTGTGCCTCC TGCTGTACC ACATTGACC ACCTAACTGA CCCCACTGTG GTCACCTTTG      240
CCACCAATCT CGAG                                     254

```

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

```

GAATTCGGCC TTGCCAGTAT TCATGCTGTT GCTTCAGTCA AGAATGAATT CCTCAGCGCT      60
ACCTCTCTTG ACCTTCACAT CTTACTTAGT GCAAATGCTG TCTCCTCCTG AGACTTGCCT      120
GACTTCGGAT ACTCTCCCTG TGACATCTTA TCTAAATGT CAAGTGAGAC TCGAG          175

```

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC TTCATGGCCT AAGTGGCTGT GTGGTATTTT CTAAGTATTT TAAAAATTTT      60
TCTCTCATTG ATACCCTATA AAAATGCAAC TGTTAAAGAA TTTGTCTTTT TTTCTCATT      120
TATTCTTTCC AGAGTATATA ACTAATTTAT TCAGCATTCA TTCATTGAGC AGATATTTGT      180
TGAGCACTAA CTATGTTTCTG GCACTGGGCA GGGATATCGG GATACCAAGA AAGCTCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

GAATTCGGCC TTCATGGCCT AGAAAATAAT TTAGAGAAAG AATAGAAAGT CATGGAAAAT	60
CTCATAGGTA GGAGACAGAA GAGAGAACAT TGTAATAAG TTTAAAAAAG ATAAGAAAAT	120
CAGGATAAAG TAGTATGGAC TCTGAGGTGG GAGAGAATTT TAAGATTAGC AGGAAAGTAG	180
TGTAGTTGGT ACTTTTGTAGT TATTACAAA GCACTCACTT CTTACAGAGT CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

GAATTCGGCC TTCATGGCCT ACGAAGATTA TAATGTATTT TTATTCTGTT TTCAGCTTCA	60
TGTTTCCTGT TGCAGGTGGG ATAAGACCCC CTCAAGGCCT GATGCCGATG CAGCAACAAG	120
GATTTCTTAT GGTCTCTGTC ATGCAGCCTA ATATGCAAGG CATTATGGGA ATGAATTACA	180
GCTCTCAGAT GTCCCAAGGA CCTATTGCTA TGCAGGCAGG AATACCAATG GGACCAATGC	240
CAGCAGCGGG AATGCCTTAC CTAGGACAAG CACCCTTCCT GGGCATGCCT CCTCCAGGCC	300
CACAGTACAC TCCAGACATG CAGAAGCAGT TTGCCGAAGA GCAGCAGAAA CGATTTGAAC	360
AGCAGCAAAA ACTCTTAGAA GAAGAAAGAA AAAGACGCCA GTATCTCGAG	410

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC TTCATGGCCT ACACATTGTC ATTGTCTGCC CATGGACTGG TTGGAGCAGA	60
AACCTCCATA CCTCAGTCTC TTGGTATTG TCTGCCCAA CTGCTGCTTT TTGTTGGGAT	120
GTTTGTGTGT GCTGGGGTCT CGGCAGCATC GGCTGCTTCC CGGTGCGCAC TGACATGCAC	180
TTGTTCTCCA CGATGGCTTT CTCTACCTTC TGAGATGCTC CATTATCAGT CTGCCTTTG	240
TTCCGGAGAG TTGAGATGGT ATCACTTCTC ATCCATCCTT AGAAATACCC CTCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

```
GAATTCGGCC TTCATGGCCT AGGGGGCTGG TAGTGAAATA TTTGGTACTG AAAGTGTGAA      60
GACCTCTGCT GGGGACTGAA CAGAGGGAGT GTCTTCTGCT GGTGGTGTGA AATCTATCTC      120
ATCATCAAAA TTATCTTCAA ATTCCTTAAA GTCTATTCTT GGGTCCTTAC AGCAGGATAC      180
ACAGTTTGCA ATTAACACTA TTAATATTAT TAAACTGCAC ACACACAGGA TCACAAAAGA      240
TCAGGAAACT TCTGCAGCAG GTGGCGCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

```
GAATTCGGCC TTCATGGCCT ACTACTTATC ATCCCTGCTC ACACACCCCT GTCCAAGGCT      60
TTATGCATCG GATTTATTTT TCAAATCAA GAGGACAGTG ATAGATGCAT TTTCCCCCAGG      120
CTGTCTCAGA AAGGTCGCTA AATGTATACT GTTGTGAGAA TTGCTGAGAT CTCCCCCCAC      180
TTTGGTTT TGCAGCAGTA AAAACTCTTT CCACTGTGAC TTATTTTCTC TCTCAGGCAG      240
CAGACTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

```
GAATTCGGCC TTCATGGCCT AGATCTTCTC CCCATTGAGC AAAACTTTCC CATTCCGGTT      60
AATGGTTTTC ACAAGCAGGG CACCACGGGG CATAAAATTG TATCATCCAG CCTCCTTCCA      120
GCAGCTCTCT CCAATTCTTG TCTGTGATGA TGCGTACGTT GCTCTGCCGC CTGTGGGTCC      180
AGGGAGCACC CCAAGCAAC AGTACCAGGA CTGCCAGCGG AACTGCAAGA CTCCTGGAGG      240
GTGCCATGTC TGCCAATTGC CCACCTCACA GCAAGCGTGG CGGCCCAACA CTAGGTTTTT      300
TAAAAACTGT GACTATCAGT GTTTTAAAAA TTGCCCGGTA ACTCTAGACT TCAAAAGTGG      360
GATAAGTAAT GATAAACCAA TAATAAACCC TGCCTCGAG                                     399
```

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 185 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

```

GAATTCGGCC AAAGAGGCCT AAAAATTAAT ATTACCTTAT GACTGCCTTT ATCATGACTC      60
TCTTAGTGGG GATTTCGTGTC CTCCACATGC CCTGGGGGAT GTGCAGCCCC CGTGCACTCC      120
CCGCCTTGGC CGGCCCTTC CCCCATGCCC AGGTAGACTC TGAGCTCTTA GCCCAGCAAC      180
TCGAG                                         185

```

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

```

GAATTCGGCC AAAGAGGCCT AGGGAACATA TCTTAAACAC TGAACCTCTT TTCAGCAAAT      60
TGGCTTTCTA GTTCTCTCAGC TCTCTCTTTA CACCTCTAAA TCTCTTTCCT GGCAAGATCA      120
TTTATTGACC TTGGTTTATG GTGATACTCT TCATTGTTAT ACTGGTGGGT GATTGTTTAA      180
ATTCATAGCT GTTTTTTCT ACTTCAGGAA GATGACACTG CTGGCTCTGC TGGCTCTGAT      240
GTTTACCTTG TGGCTAATGC CTGTGTTTGC CTGTGTTTGC ATTTATTCCA CGATTCAATT      300
GTTAACATTT ACTAAGCTCG AG                                         322

```

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

```

GAATTCGGCC AAAGAGGCCT ACTCATAACA GCGTCAGAGA GAAAGAACTG ACTGAAACGT      60
TTGAGATGAA GAAAGTTCTC CTCCTGATCA CAGCCATCTT GGCAGTGGCT GTTGGTTTCC      120
CAGTCTCTCA AGACCAGGAA CGAGAAAAAA GAAGTATCAG TGACAGCGAT GAATTAGCTT      180
CAGGGTTTTT TGTGTTCCCT TACCCATATC CATTTCGCC ACTTCCACCA ATTCCATTTT      240
CAAGATTTCC ATGGTTTAGA CGTAATTTTC CTATTCCAAT ACCTGAATCT GCCCCTACAA      300
CTCCCCACCT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC	AAAGAGGCCT	ATTATGCTGG	TGCTGTCTAC	TAATTTCAAG	AAAACTACA	50
AGTCTGGCTA	GACTCTGCTA	CCGCCTAGCA	CTGAGGTGTG	GTCCTTTATC	TGTTATTACA	120
TTCTTCGTGA	TAATGAAATT	CTGAAACACA	TGCTCCAGGC	ACCTTTGTAA	ATGTGAAGGT	130
GAATAAAGTA	TTTGTTTGTT	GTCTGAAAAG	AGATCTTTGA	AATGTTAAGT	TGCCACAGAC	240
CCAGACCAAG	GAGCCTGCTG	AGAGTTTTAA	AGGCTCTTAT	TGGATGACAG	TAGATTCTTT	300
CCTTGAAATG	TCTATAATGA	ATATTCAAGA	ATGCTCATTG	TGCATGAAAT	TTGCAATTTT	360
AATTATCAGT	GAAAGAAAAG	ATTACACAGT	GCTAAATGAT	TGCCATGGAA	AAGTTATGGC	420
TACCTCTTGG	AGTAGAGAAA	ATCTCAAAGG	CCGCTACTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC	AAAGAGGCCT	AGTGGGCAAC	TTGGAGAAGA	GTGAAAAACA	CTAAAGAATC	60
ATCTCTTTTC	CGAGTCACAA	AGTCCCATGA	ACTTTGTGAC	TCAGAGACAC	TTTTCGTGAA	120
AATTACCTTT	CGGCGGGACA	CCGTCTCAGG	GCAGCTTTT	CAAGGCTTCG	CTTGACATGA	180
TTTCCTTCCC	TTCATCAGTC	ACTTTGGATC	CAGCTGAATA	TCTCTCTCGG	GTGAGAGCGG	240
ATGTGGACTG	GCCTCCACA	GAAGAAGAGT	AGGTGGCTTT	GGTGGGGGTT	GGGGTCCGGG	300
CTGGCTTCTT	GGTCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC	AAAGAGGCCT	AGTGAAAAGA	AAGAGACTGT	NAAATAATTC	TGCATATCCT	60
CAGTGGATAA	TTCTGTNACC	TATCTGTCAG	CTATTCCATA	TCAATAAAGG	ACACAGCTGG	120
TAATCCAAAA	GGAAAGGATC	TCTTGATGAA	AGTGTTCTGC	CATTCTTATT	AAAGTCAACA	180
TACAAGATAC	ACTCTTAGTG	ATTTTGAAC	CCATAATTAT	ATTGTCTGTA	TAATAATTGG	240
CACTTAACGG	TTACAGAACA	CTTTCAGTGA	TATTTTCCTT	AGTGAATCTT	AACAACAATT	300
CTACCAGTAA	TTTCTAATAT	TTGCCATGAT	TAGACTTTCA	AAATTAGTCC	ACGCACTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC AAAGAGGCCT AAGAAACATG GCGGCCGCGA CGTTGACTTC GAAATGTAC      60
TCCCTGCTGT TCCGCAGGAC CTCCACCTTC GCCCTCACCA TCATCGTGGG CGTCATGTTC      120
TTCGAGCGCG CCTTCGATCA AGGCGCGGAC GCTATCTACG ACCACATCAA CGAGGGGAAG      180
CTGTGGAAAC ACATCAAGCA CAAGTATGAG AACAAGTAGT TCCTTGGAGG CCCCATCCA      240
GGCCAGAAGG ACCAGGTCCA CCCAGCAGCT GTTGTCCCAG AGCTGGAGCC TCAGCTTGAA      300
GATGATGCTC AAGGTACTCT TCATGGACCA CCATTCGCTG TTGGCAAGAA ACGGCTTTAC      360
TTACAAAACA GTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC AAAGAGGCCT ACTCTGAATT AATGCAAATT CCCGTTGTAC TGTATTTAAT      60
TATGCACAAA ATGGTGCCCT TGA CTGAGAT TTCAGTGAAG AACTTCATTT TTTTACTTTT      120
AAGTCTCCAA GTAGGAAATT CAATTAGCGT TATGAAAGAA AACTAAAAC TCGAG          175

```

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC AAAGAGGCCT AGGCAGCAAT GTTATCTGTC CTTCATTCTT GCATGTTTTT      60
GGAAATTGCT TTTGCTTTTA CTTTGGTTCG TCATGGCAAT CAGGTGCCTT CTCTGGTTCA      120
TTTTGCACAG ACCTGCCTAG AGCTGGAACG TTACCTCCAG AGCGAGCCCT GCTATGTTTC      180
AGCCTCAGAA ATCAAATTG ACAGCCAGGA AGATCTGTGG ACCAAAATCA TTCTGGCTCG      240
GGAGAAAAAG GAGGAATCCG AACTGAAGAT ATCTTCCAGT CCTCCAGAGG AACTCTCAT      300
CAGCCCGAGC TTTTGTACA ACTTAGAGAC CAACAGCCTG AACTCAGATG TCAGCAGCGA      360
ATCCTCTGAC AGCTCCGAGG AACTTTCTCC CACGGCCAAG TTACCTCCG ACCCATTTGG      420
CGAAGTTTTG GTCAGCTCGG GAAAAATTGAG CTCCTCTGTC ACCTCCACGC CTCCATCTTC      480
TCCGGAACTG AGCAGGGAAC CTTCTCAACT GTGGGGTTGC GTGCCCCGGG AGCTGCCCTC      540
GCCAGGGAAG GTGCGCAGCG GGA CTTCGGG GAAGCCAGGT GACAAGGGAA ATGGCGATGC      600
CTCCCCGAC GGCAGGAGGA GGGTGCACCG GTGCCACTTT AACGGCTGCA GGAAAGTTTA      660
CACCAAAAGC TCCCACTTGA AAGCACACCA ACGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC	AAAGAGGCCT	AGAAAAATAC	TTGGGCAGAA	AGAAAAATATC	ATCAAATAAC	60
ACCTATTTCT	TTTCAGCTAT	AGAGATGGCT	GGATATCAAA	AGCACCCACGG	GAGCTTTGCA	120
ATTTGCTGCC	TCTTTTCAGC	CCTCAGCTTG	ACTCTCAGTT	TTCAAGAGGG	AGAAAAATGAA	180
TGTTTCCCAG	CATTCTCTGT	CCTTTGCTCC	AAAGAAGAGA	GCAGGTGTTG	GCTTCCAAAC	240
CTTCCGTATT	TTCTTATTGC	TGTTAGGGGG	ATCAACTGCA	TGTTTCCTGA	GGGAAAAGGG	300
TGGCTCACTG	ACCTACTTGA	AGGCATTCTC	TCAGTGGAAG	CTGGGCAAGA	GAATCCAGGG	360
ATTTCTTTTG	CAGGTTTCTG	CGCAGTGCCC	CTGCCATCAA	GCTGCCTAAA	ATGTGAATAT	420
TGCTTCCCTG	CGTTTCAGAG	GTGGCCGCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC	AAAGAGGCCT	ACAAAATGTG	AATGGAACAA	ACCTGCACGT	GTACCCCTTG	60
ATGTGTGGAT	GTTCTTTGTT	TTTATTGTT	AAACCTGATG	TCTTGTCTGT	ATGACACATT	120
TATTGGAAAC	GTTTTTCCC	TATTCTGTGT	CTTGTATTTT	ATTTTCTCGT	GTTCTCCAAA	180
GAGCAGATAT	TTTAAATTTT	TATATAAATC	CAGTTTGTCA	ACATTTTAA	AGGGTTCATG	240
CTTTTGTAT	CCTATTTTCA	AAAACCTTGG	CTACTTCAAG	GTCACAAAGA	TTTGGATT	300
GTTTTAATCT	ACAAGTTTAA	TAGCTTTGAC	TTTTATATAT	AAGTCTGATT	CATTGGAGT	360
TAATTTTGT	GTACAGTGTC	AATTAAGGGT	CTAGGTTTCT	TTATTTTCTT	ATGAATATCC	420
AATGGTTCCT	CGAG					434

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCC	AAAGAGGCCT	ACAAACACAG	AACATTTCCA	TCGTTGCAGA	GAGTACTATT	60
AGAGAGCAGT	ATTCCAGAGC	CTGTGATCTT	AATCACTACA	CCTAAAGCCT	CCCAGTTGAC	120
AAAGTTACCA	CCTTTTTTTG	GTGTGTGTGC	ACGTGCGTGT	GTGTGTGTGT	AAGTATATAT	180
AATTTAAATC	ATTCCATTAA	ATTTACCTCT	GAAATTCAAA	AGACTGAAAC	AGATCTTCTT	240
TTTATCAAAT	AAGTTGATTG	CAGAGATTAT	ATTGGTGT	ACATTTTCAGG	CAACCTGCTC	300
ATGAAATTAT	CCATTGCTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC AAAGAGGCCT ACTCCTCCGC CTGCAACCAT TGTTCCTAC CACTGGATTA	60
TTCTGAAGCA AATTTTAGAC ATCATATATA TTTATCTCTG AAAGAGGACT CTAAAAACA	120
TGCACTTATA CCTCTATTAC ACTGACAAAA TTGGTAACAA TTCCTTTATA TTATCAAATT	180
TCCTTATTGA GTTCCTGATG TTCAAATTC TGATTCTCCA GATGCTCCAA ACTTCCAGAA	240
ACACAGATTC CCAGATGGAA TCCTGGGGAA GGCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC AAAGAGGCCT ATTTTCTAAT AAAAATATT TTATGGTAGG TTTTGTGGAT	60
TATTGAATAC AATCTGGCAT TCTGTTTAAT ATGTATGTTT TCCTGAATGA GGGGGTACAT	120
TGTAATTTTA ATTATTAAAC TCACAATGTT TTTGGTTTTA AAAATAAAAA TTTTAGGAGC	180
AAGCAGTGTT CCTGCCTTCT TTTCTGAAGA TGATTCTCAA TCGAATGACT CAAGTGATTC	240
TGATAGCAGT AGTAGTCAGA GTGACGACAT AGAACAGGAG ACCTTTATGC TTGATGAGCC	300
ATTAGAAAGA ACCACAAATA GCTCCCATGC CAATGGTGCT GCCCAAGCTC CCCGTTCAAT	360
GCAGTGGGCT GTCCGCAACA CCCAGCATCA GCGAGCAGCC AGTACAGCCC CTTCAGTAC	420
ATCTACACCA GCAGCACTCC ACCTCGAG	448

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC AAAGAGGCCT AACTTTTGTA ATTTGAATTG GGTCCCGCTT AGTTCTTGAA	60
TTGTTATGAA AATCCTATAT CTGTTTGAT ATTTGCAAAC CCTTTGTATT ATAATTGTTG	120
ATATTTTCCC TTTTAAAAA ATACCATTGA AATCAGCATG ACAAAAATAA CACTGTGGGC	180
ACTCGAG	187

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:


```

GAATTCGGCC AAAGAGGCCT AGACCAGAAT AAGCCTTTTA AGGTAAACCT CAAAATTATC      60
ATTTTATGGT AATACTGACC ATTTTAGTCC CCTAGGTTTG ACATGGGAGA TAGTGACTAC      120
ACTGGTGTCT GACTTTTTTC CTAGAGATTT CTCCCTGAAA AATACAAGGG CTGTTGGTGA      180
GAGCAGACTT GAGGTGATGA TAGTTGGCCT CTGGTCTACA AAGATTTCAT AACTCCTTGG      240
AAAGCTTCTT ATAATCATT TTAACCTCTT GGTAGCTAGA AATTTAGAGT AGTTGAAATC      300
TTTAGGAATG AACTTCTGAG GGCCAAAAAA TGTGACTGAC AACTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

GAATTCGGCC TTCATGGCCT ACATCACCAA TTCGGCTGGG TAAGGGTCCC CATGAAGGCG      60
CAGCCGGGTA TAGAGGTGCA GGGGAGAGCA GCCTGGGGAG TCCCTATCTG GATAGGCTCC      120
AGCCTGGGTC GGGGCGGTCC TGGTGCCCGG TGAAGCGTCA AAAGAGGGAG CCTGAGCGGG      180
GCAACGCAGA AGGGTGGAGA GGAGGGGGTG GCGAGGGCGG GCAGCGAGGC CTGGAGCCGC      240
CAGGAGAGGG GCGGGGGGCG GCCCTTCTCC AGGAATTTC GGGGATCGTG TTACAGCGTT      300
GGCGGAGCCC GAGCGGAGTG GGACTCGAG      329

```

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AGAAAGGGGA GGGAACGTGA CAGGCAGGTG TGGGATAGGG      60
ACTTCTCTTC CGGTCAGAGC AAGGGTCGTC CGAAACCAA ACAACCTCT TCCCTTCATC      120
TCGCCCCGGA TCCAAAGTCT TGGGGCTAGG CTGGGGCGGG AGTGGCACGG AGATGTAGGA      180
ACACTGCCTT TCGTTACTTC TCCTGCCATG GCTGACCTTT TTGTCTCTTG TTTTCATGGT      240
TTACACGTAT GAATGGCTTG AGACTGAGGA TTAGGGGAAG AAGCGAAGGC ATCATCTAGG      300
GCTGTGCTGT GCCAAGTTGA GCAGTTGTTT AACTGTTAG AATTTTGTAC TGGTGTAATA      360
ACCCTCTATG CTCGAG      376

```

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

```

GAATTCGGCC TTCAAGGCCT ACGTGAAACC CCATCGGCTT CATTCGCTCC TTGATTTAAA      60

```

CCACGCCCCG CTNTCTGCCC TCTTTGATGC TGCTGGGCCA GGTGCCCCAG CCATATCCCA	120
GCCCCGTCTG CAGGGAGCCG GAGGCNGCTG CTGCTGCTAT TGTGTGGATG CCGCGCGTGT	180
CTTCTCTTCT TTCCAGAGAT GGCTAACAGG GGCCCGAGCT ATGGCTTAAG CCGAGAGGTG	240
CAGGAGAAGA TCGAGCAGAA GATCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT AGATGTGTTG AACCTTATTC TTGTACATTC ATTCAATCAA	60
GGCAAACCTT TATAATTTT CTTTGTGTTT CAATGACCTT GAAATGTTAT AGCATGGTAA	120
TATTCTATGC AACTATAGTT ATACTTTTGT GTTTGACACT GTATTTTTC ACATTGATT	180
ACTGGTTGAG GCTCGAG	197

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AGCAAGACCT TTAAAGTATA TACTCTGAAA GTGTGGCTAA	60
TATGATCATG ATGCTGTAGG AAAAAAGGT TATATGTCCA AGTGTATGTA CTTGTAAATG	120
TGCCTAAAGA AACCTGGAAG GATACACAGG TCTTCCCTGG GGTACAAGAC GGAGAACTGG	180
GATCATCATC TTAACCTCTAC TCTTCCCTTT TACTCTTCTG TCCTCTTAGA GACTTTTGCC	240
TGTATACATG GATTACTGTT ACTTAGCAGG GCGGACCGGT TGGCCAAAGC CTTGGTGTGC	300
CCTTGGCACA ATTCTGCCAA GACCCTTACC CTCTCCTCTC CTCANGGCTC CCTTAACCCC	360
TCTCCCCACA TCTGGAAAAC CCTGGATACA TTTTCT	396

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC TTCATGGCCT AGGAAGAGGT TGAGAAGACT CCTGGGCTTC AGCCTCTCCC	60
ACCCAGCCCT GCCCTCACC TGCCTGCCCT CCCCTCCCCC ACTCTATACT AGGGACTGGA	120
TCTCAGCCTC TGATCAGTTT CACAAAGTTT GTTCCTAAG GAAATCAAAT CCCATTGTCA	180
CCTAACTCTG AAGATCTAAA TAGCCCTTGG ATCAGTACGG GAACCCCAA TCCCACAGGG	240
CCAGATGTGG AGTCTGTGTC TGCCCCGCTC TTCTCTCCAT CCTCAAAGCC CCCACTTCTC	300

TCCAGGCTGC TTCTCGAG

318

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

```

GAATTCTAGA TCCTGCCCTC GGAACAATGG GACTCGGCGC GCGAGGTGCT TGGGCCGCGC      60
TGCTCCTGGG GACGCTGCAG GTGCTAGCGC TGCTGGGGGC CGCCCATGAA AGCGCAGCCA      120
TGGCGGCATC TGCAAACATA GAGAATTCTG GGCTTCCACA CAACTCCAGT GCTAACTCAA      180
CAGAGACTCT CCAACATGTG CCTTCTGACC ATACAAATGA AACTTCCAAC AGTACTGTGA      240
AACCACCAAC TTCAGTTGCC TCAGACTCCA GTAATACAAC GGTCAACCACC CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

```

GAATTCGGCC TTCATGGCCT AGTCTCTTGA AAAGCCGCAT TTCCAGGCGC TTGGCCAGTG      60
GCCTGGGAAG TAGCCTGTGC TTGTATTGAG ACAGTCCCCC AGCAGCAAAC CATGTTCCAG      120
TCATTCCCTT TCCTACTTTG GGGATTGTTG CCTTTTCTGC TTGTTTAAAG TAAAACAAGC      180
ATGTAATTGT TTGTATGTAT GTATGTATGT AGTTGTACGG TGGGCACAAA TAAAAGAGG      240
GCTGTATCCA AATAAATCAT TTCTGGCTGC TCACTGGCAC AGTCCCTTTG CTCCGTCCCC      300
TCCTGGCTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC TTCATGGCCT AGGCAGCGTT TCACCGCTGT GGAGGACCAG TATTACTGCG      60
TGGATTGCTA CAAGAACTTT GTGGCCAAGA AGTGTGCTGG ATGCAAGAAC CCCATCACTG      120
GGAAAAGGAC TGTGTCAAGA GTGAGCCACC CAGTCTCTAA AGCTAGGAAG CCCCAGTGT      180
GCCACGGGAA ACGCTTGCCT CTCACCCTGT TTCCAGCGC CAACCTCCGG GGCAGGCATC      240
CGGGTGGAGA GAGGAATTGT CCCTCGTGGG TGGTGGTTCT TTATAGAAAA AATCGAAGCT      300
TAGCAGCTCC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AGGAAGATGG CGAAGGTCTC AGAGCTTTAC GATGTCACCT      60
GGGAAGAAAT GAGAGATAAA ATGAGAAAAT GGAGAGAACA AAACCTCAAGA AATAGTGAGC      120
AAATTGTGGA AGTTGGAGAA GAATTAATTA ATGAATATGC TTCTAAGCTG GGAGATGATA      180
TTTGATCAT ATATGAACAG GTGATGATTG CAGCACTAGA CTATGGTCGG GATGACTTGG      240
CATTTGTTTG TCTTCAAGAG CTGAGAAGAC AGTTCCTTGG CAGTCACAGA GTCAAGCGAT      300
TAACAGGCAT GAGATTTGAA GCCATGGAAA GATATGATGA TGCTATACAG CTATATGATA      360
GGATTTTACA AGAAGATCCA ACTAACACTG CTGCAAGAAA GCGTAAGATT GCCATTGAA      420
AAGCCCAGGG GAAAAATGTG GAGGCCATTG GGGAGCTGAA TGAGTATCTG GAACAATTTG      480
TTGAGACCA AGAAGCCTGG CATGAACTTG CACTCGAG      518

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTT CATTTCCTTT GTAGACTAAT GTTACAATAA      60
ATAAATGGGA ATTTTAAATA CCTGCATGTT CTGTTTTTCT CTTTTTCTT TTTTCAGCCA      120
TAATGAAAGG AAAGTGACCT GCAAACATCC AGTCACAGGA CAACCATCAC AGGACAATTG      180
TATTTTTGTA GTGAATGAAC AGACTGTTGC AACCATGACA TCTGAAGAAA AGAAGGAACG      240
GCCAATAAGT ATGATAAATG AAGCTTCTAA CTATAACGTG ACTTCAGATT ATGCAGTGCA      300
TCCAATGAGC CCTGTAGGCA GAACCTCACG AGCTTCAAAA AAAGTTCATA ATTTTGGA      360
GAGGTCAAAT TCAATTAATA GGAATCCTAA TGCACCGGGC GATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAATTCGGCC AAAGAGGCCT AGTACAGTCC CAATCAAGAA GCCTTATTAA CCTTCTGTGT      60
GAGGGACTAG ACTCAGTGTT GGGTTTGGAG GATCCACTGG TGAGGAGCAT TCAGTCTAGC      120
AGGAGAAATG TCAGCATTAT TTATTACACA ACAAGATCTG ATGCATTGAG ATGTACTTAC      180
AGGTCTAGGA ACTGTTTCTG GAGGCACAAA TGAATGAGAG AGAGAGGGAG AGAGGGAGAT      240
TGAGTGAGTT AGAGAGTTGT TGGTGCTCCA CAAGGAGCAG TAAAGTATTT TAAAAATAAA      300
AAATAATAAG GCTGACTCTG TGTCTGCTCT AGGGGTTGGC CATGCTCCAC AAAAAGCAGT      360
AAAGTGTGTT TTGTTTGTGTT TCGTTTTTTT TTAAAGACA GACGTCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCNGCC AAAGAGGCCT AGTTNATCT TCTTACCTAT TTACTGAATG CNACATTACT      60
GCACACCAAG ACAAAGAGC TCTCCAGGAA AACATTGGAT ATATTGAGAG CATTAAAAGA      120
TACTGCAAAA GCTCTAATAA ATTCAGTCTG CTTATTTTCC AAATTTTATA AACTACATAC      180
TTAGGAAACT GTGCTTTCAG TGAGCTAAAC TTCTTTTTTT AAGTAACTAT CATAGTTTAA      240
AGAAAAACAT TTTAAGAAGA CAAAAGTAT TTATTAAGCC CATCTAAAAG GCTAATGCAA      300
ATTCCTCAAAA AAGGAGCACA TAGAGATAGG CATCTCGAG                          339

```

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGACACTA GCCCTTTTTT      60
CTGTTGGTTT AGCACAAATA CTTCCCTCCT CCGGCACCTC CAAACCTACC CCACAGTCAG      120
TGTACTTGTT TTATATATAT TTAATCTTAT TCAATGGAAA CCATGCTTTT GTCGTTTTAT      180
ACTTTGCTAG GTAGACTTCT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```

CTCGAGAGGC GCATCTTCAC TGGCATATGA CAGGCTGTCA CTGCAGCTAA TGTGGGTACA      60
GTTTTTCCAA AGACCTACTG ATGCATCTAC CGTATTGGAA ACCAACCAGA CATTGGCAAT      120
GGTGCTAACA AATAGCATAA TAACAGTAGC GATGTGGACC ACAAAGATAC CAGCCAGCAA      180
TACCAACATG TTGGCTCTTT TTTTCTTGGT AACTTGTGAG CAAAGAGAGT TCTGAAGGGT      240
CCCAGCGACA GAGGCACTCG AGGCAGGTCT AGAATTCAAT TAGGCCTCTT TGGCCGAATT      300
C                                                                    301

```

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

```
GAATTCGGCC AAAGAGGCCT AAAATATTTG AGTCTAACT TATAAATTT GCATTCTCCC      60
TAACGAAAAA ATTTCTATTA CTGTGGTGA TTTCTTTAA TTTGAATAT AGTTACTGAA      120
ATATTAATTC TTTCAATTAA ATTTATATTT ACTCACTGGT TCCTTCCCCT TCTTTAAGGA      180
GACAGAAAAC ATTAACACTT TTTAACCTCT CATTTGTTTA AAAATTTATT GACCTCTCCT      240
CTGAGACAGT TTGTATTCCT AGATCTCTT AAACATAAAT ATGCTTATTT TCAAGTTTTT      300
GTCACAGTAT TCACTCGAG                                     319
```

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

```
GAATTCGGCC AAGAGGCCT ATTTAGATTT AACCCAGTT GTAGACATTT GCATAGATCA      60
AGCAAACTA GAAGAGTTG AAGAGAAAGC ATCAGAACTT TACAAGAAAT TTGAAAAGA      120
GTTTACCGAC CACCAAGAAA CTCAGGCTGA ATTGCAGAAA AAAGAGGCAA AGATTAATGA      180
GCTTCAAGCA GAGCTACAAG CTTTAAAGTC TCAGTTTGGT GCCTTGCCAG CTGATTGTAA      240
TATTCCTTG CCTCCCTCTA AAGAAGGTGG AACTCGAG                                     278
```

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

```
GAATTCGGCC AAAGAGGCCT ACCTGGCTCA TTTATAACCT CCTCGATCCT ATTACTGATT      60
TGCAATCTTA ACTACAGGTA AGAGAAAACC AGTGCAACCT AGCTTTCAAT AGACAGGAAT      120
TTGCTGGCTC ATATAAATGA GACATCCAAT AAAGAAGAAA AGTTGGAAAA AATGTGTCAA      180
ATGTAGCATC CTCTCTCTCT CTTCTCTCT CTCTCTGTT TTTACCTAG GCTTGTGCCA      240
TAAACCTGCT TCTACATCAG TTAGTGTTG TATGGGCGTC TTGTTGGCTG AGCTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

```

GAATTCGGCC AAAGAGGCCT ACTTAGCAGA ATATATTCTT TAATAGCTCC CATAAGCAA      60
ACAAACCCAA AATATATTCT CCTGACCCTA CATTCACTTC CAACTATCAC CCTACATCTA      120
CATTCTCCTT TTCATACCAA ACTTTTCCA AGCAGTTGTC TATATTATG TCTCCACTTC      180
TTTACCTCCT ATTCTTGCTT CAGTATGCTT CAGTTGAGCT TCGTCCCCCT GTAGTCCACC      240
ACCAACTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

```

GAATTCGGCC AAAGAGGCCT AGATTGATTC TGTGTTGTGG TATTGGCCCT TACATACAAC      60
TGGAGGAAGT GTGAATTTC TCACTTGAT AAATTGGACT GTCATGATTC TTTATAATTA      120
CTTCAATGCC ATGTTTGTG GTCCGGGCTT TGTCCCTCTG GGGTGGAAC CGATGTGTGA      180
TGAAGATGGA CCATCACTGT CCTTGATCA ACAACTGTTG TGGTTACCAA AATCATGCTT      240
CGTTCACACT GTTCTCCTT TTAGCACCAC TGGGTTGTAT CCATGCTGCT TTCATTTTGT      300
TGATGACTAT GTACACACAG CTTTATCATC GGCTCTCCTT TGGGTGGAAC ACAGTGAAGA      360
TCGACATGAG TGCAGCACCC TCGAG                                     385

```

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGGCC AAAGAGGCNT ACCCNGATTA TAGTTTTTGT ATTGTTTTTA CAATTTTTGT      60
GAATTAGGAT CCAAATAAGG TCTGTAAATA TTACATTGGG TTTAGGTAAT CGATACTTTT      120
TTTCTTTTAA TCTATAAGTT TTCCTCTATC TTTTATTGT GGTATTCCC ATACAATTGG      180
TTTGTGAAG AAGCCAGGTC TTTGCCCTAT AATACTTCTC AGAATCTAGA TGTGTTGAT      240
GAGATCCCAG TGGTTTCATG TAATATGTTT TTTTGTCCCT TGTATTTTCT GTAAATTTTG      300
TTTATTTTAT TTTTATTATT TCTATTATTT GAGATGGAGT CTTGCACTGT CACCCAGGCT      360
AGAGTACAGT GGCATGATCT CAACTACCG CAACCTCGAG                                     400

```

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC	AAAGAGGCCT	AAGAGCCTAT	AAGGTTTACA	TATTTCACTG	GAGAGAGAAA	60
TAGGGACATA	CAATAAATGA	TTTTATAATA	AATTTCATG	AAAAGTGAAT	CTGAAAACCC	120
CACCGGAAGG	CAGAGTAGTG	CAGCCAAAGG	AGCATGAATT	GTGGAATCAT	ACAGCTCTAG	180
GTTTCAGATCC	TACCTTTACC	ACTTGATAGC	TAGGCAGACT	TCAACAAGTT	AGTCTAATTT	240
GAGCTTCAGT	TCTCTCATCT	GTGAAAAGA	GAAAATACAG	CCACTTTATA	ACATTATTTT	300
AGATGCCATA	AGGTAGGTAA	AGTGCCAGAC	ACATAGATTG	AAAAATCTCA	ATAAAAATAGG	360
AAGGCTGGAA	TTTCCAAAAT	TTTTTCTTGC	TTTCACAATC	TGGGTTCTAA	ATTTATTATT	420
ACTCTACCCA	TCACTTCCTC	CTTCTCCCTC	CACAACTCA	CTATAAGCCC	AACATCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

GAATTCGGCC	AAAGAGGCCT	AGTGTCATGT	AGAGGTCTCA	GCATTTCTCT	TAGTATTTGA	60
CTGTATTAGT	TTTACATATT	TCTTCTTTTG	TTTAGAGTAT	AACCGCTTCT	TACATTTCCCT	120
TCAGTCGTTT	TCTAAGAAG	AAATTAATCT	TTTTAGAAAT	CCTGGCAGTT	ACCCCGCAAT	180
TGATGTTTTG	GTGGAAAATT	AGAGCACACC	AGTTTGTCAT	AACTTTAAGA	AACATTTTCA	240
CTTTATTGAT	ATTCTGAGGA	TTTAGTGAT	TGGGTAATT	TGGGTCTAAT	AAAGAGTAAA	300
TTGTTGAATA	CTCATTTGTT	TTGAGTCATC	TATATTTTTA	AACCCTTTCT	TTAGTTGTTT	360
TTTCATCCCT	AATACAAATG	CAACTTTCCC	ACTTGCTCGA	G		401

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

GAATTCGGCC	AAAGAGGCCT	AAACTGATGT	CTTCCATTG	CTGGATAGGA	CATGCTGACT	60
GATGACCTCA	CAGACTGTTC	TTATGCCCTC	ACTACTCACC	TCACCACCTA	CAGTCATAGG	120
CTGACTAGGA	GTTGGTTGTG	TACATTCCCTA	AACCTTTTTG	CCCTCTTTAT	TTGCTTTTCT	180
AAGTGTGTAT	TCAGTACTAT	GTAAATTGAT	AAAACATGAG	TGTGAAAATA	TTTTTTTTTG	240
CTATAAAAAT	GTAAATTGAA	TTCTTTGGGG	AAGAGCTGAT	AAAATATGTC	ACTTAAAGAT	300
CTTGTTAAAT	TAGATGAGGG	AGATATAGAT	GACAGAAACT	CTTCAACAA	ATATCTAAAA	360
AGATGTGCCA	CTCCAATTAT	TTTGTGAGTG	TCTTCAAGTT	T.TGTCCAC	TTTAAAGAAA	420
ACCAAACCTGG	CCATCATAGC	CAATGAATTA	TGCAGGAGTC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```

GAATTCGGCC AAAGAGGCCT ACACATTATA TTAGATTTC TAGAACTGT TGGAAATATC      60
TAGCACATGT GCTTTATCCC ACAATAATTA CATAGAAAAT TAAAAAGAAT TAATTCTAAT      120
GTAACCATCT TTTTACTTGA CTTTTTTTTT TTTTGCTCTG CTCACAGGTC TAATTGTTGT      180
TATTCTCACT TTATTTTCTT ATAAGGTAGG AATAATATCC ACTTCATTAG CTCATCATGA      240
GGGATAAGTA GGATTGGAAA AGATACTTTC AAAGGGCACC TAACTGTGAA GAAGATGCCT      300
TCATTTCAT TTCTTCTTG GCACATTTCT TGTATCCAG TCATTCAATTA GGACTCCATG      360
TTTATTGAAC ACCTACTCTG TGCCAGGCAC TTTTCTCTGT TCTGGAAATA TCACCATGTA      420
AAAACAAATA GCTGAAGAAT GCCCTGCCCT CATAGAGCTT ACAGACATAG AGCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```

GAATTCGGCC AAAGAGGCCT AGCGTTTCTG ACTTTATTAC TGGTAATTTA TTGCACAGGT      60
TTTTCTGCAT CAAAAAAGTA TCTGCTAAAA TAGAGAAAGT TGTGTCTGAA TTCACATTTT      120
CCCCCAACTT CTAAAAATAT TTCCCCTAAA AAAGAATCCA CTCATCTAAT TTAAAGAAA      180
ATATACTTCT TACACAAGAC AATCCAACT GATGCAAAAT ATTTATTCCA AGTTAGTTAT      240
TTTATGCAGT AGTTTCCCCC TCGAG      265

```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGAGAA ATTTAATCT TGAAAGACTT TTCAGGGTAT CTCATTTTTT      60
AGGTGGGGGT GGCAGGTGTA TTTCTTTTTT AACAAATAAA AGGCATTAA GTAAAACTAA      120
AATGAAAAAA GTAGGCCTTC TGACATTGTG TACTTGGTGG TTCTGTCCCT CTGCCTGTAA      180
CAATCTCAT TTTTGTTACC AAGAACTGTA TGAAAGAAGT AAATCCACCC CTCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GAATTCGGCC AAAGAGGCCT ATGCTGTGT TGGGTTGACA GTGAGGGTAA TAATGACTTG      60
TTGGTTGATT GTAGATATTG GGCTGTTAAT TGGTGTGTA GAATATTTGA GCACAGGTGG      120
AGTAGAAACA AATCACAAAG ACTTTAAGGA GTTGAGGTAT AATGAAAGTC TCACAAACTT      180
CAGCTGTCAT GGAAGAATG GAACCACCA TGAAGGATC ACTCATGGTT TCAAGTTACA      240
GAGTGCCTAT GAGAGTGGCC TGATGCCTTA CACGAATTAC ACATTTGATT TCAAGGTAT      300
AATAGACTAC ATTTTCTATT CTAAACCTCA GCTGAACACC TTAGGCATCC TGGGCCCTCT      360
GGACCACCAC TGGCTGGTTG AGAATAACAT CAGTGGCTGC CCGCACCCCTC TCATCCCTC      420
TGACCACTTC TCACTTTTGT CACAACCTGA GCTCTTACTG CCTTTCCTGC CCAAGTCAA      480
CGGCATTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAATTCGGCC AAAGAGGCCT AAGAAATCAA AATTAAAGCA ATCAAATAAT ACTCACATTT      60
ATATAAGAAA TACTTCAATT TACTTTCCAA TGAGTAAAGT TTTATATTTA ATGTTTAAAT      120
ATTTTCATATT TTAGTTTCTT GCAATTATTT ACTTTTCTA AAACCTACTT AAATTAGGTT      180
TAAAAGTCTA CTATATATAA TTTGAAATTT TATTCAGTTT GCCTACAGGT GTGTTTTAAC      240
CACTGTGTAC ATAGTATTTA ACGGTCTGCT TTTTTTTTTT TAATATGGT TCATGNTGA      300
ACATCTGTAT GTTCATACTT TTCTTGACAA AGTCTAAAG GTTACTGTGT TGAAGCATAC      360
TGAACGATTA CTGATAATT CTATTTTGAG GAACAGGTAT GTCAGTTCTT TCTCTCTGTT      420
TGATAATTCT CTCTTTTCCC CTTAGGAATC CAAAAATCCT TGTGGAGTGT CTTACTCCTG      480
ATTTTCGAGG TGATCTCAA GCAATAGAAA AAGTTGCTCT GTCAGGATTA GATGTGTATG      540
CACATAATGT AGAAACAGTC CCATTGCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC TTCATGGCCT ATCGAGATAC GCTTTCGCGC ACCAGGTACG CCTGGTGTTT      60
CTTTGTGGTT TTTCGGATT TTTTGGGGA GTGCGGGGAG TCACAGTTAG AAGGCGGCCG      120
GGTGTGCTG GAGGAAAGTG CTGAGGTCCA GAGCGTAGTC CGAGGGCTCC GAAGTCAGAT      180
TAAAGGGCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC TTCATGGCCT ACATAATGAT GCTGCCTCAA AACTCGTGGC ATATTGATTT      60
TGGAAGATGC TGCTGTCATC AGAACCTTTT CTCTGCTGTG GTAACCTGCA TCCTGCTCCT      120
GAATTCCTGC TTTCTCATCA GCAGTTTTAA TGAACAGAT TTGGAGTTGA GGCTGGTCAA      180
TGGAGACGGT CCCTGCTCTG GGACAGTGA GGTGAAATTC CAGGGACAGT GGGGGACTGT      240
GTGTGATGAT GGGTGGAAACA CTACIGCCTC AACTGTCGTG TGCAAACAGC TTGGATGTCC      300
ATTTTCTTT CGCCATGTTT CGTTTTGGAC AAGCCGTGAC TAGACATGGA AAAATTTGGC      360
TTGATGATGT TTCCTGTTAT GGAAATGAGT CAGCTCTCTG GGAATGTCAA CACCGGGAAT      420
GGGGAAGCCA TAACTGTTAT CATGGAGAAG ATGTTGGTGT GAACTGTTAT GGTGAAGCCA      480
ATCTGGGTTT GAGGCTAGTG GATGGAAACA ACTCCTGTTC AGGGAGAGTG GAGGTGAAAT      540
TCCAAGAAAG GTGGGGGACT ATATGTGATG ATGGGTGGAA CTTGAATACT GCTGCCGTTA      600
TACTCGAG                                     608

```

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATCGCCT ACAGCGCTGC CTTTCCTTAT GAAGAAGACA CAAACTTGGA      60
TTCTCACTTG CATTATCTTT CAGCTGCTCC TATTTAATCC TTTCGTCAA ACTGAAGGGA      120
TCTGCAGGAA TCGTGTGACT AATAATGTAA AAGACGTCAC TAAATGGTG GCAAATCTTC      180
CAAAAGACTA CATGATAACC CTCAAATATG TCCCCGGGAT GGATGTTTTG CCAAGTCATT      240
GTTGGATAAG CGAGATGGTA GTACAAATGT CAGACAGCTT GACTGATCTT CTGGACAAGT      300
TTTCAAATAT TTCTGAAGGC TTGAGTAATT ATTCCATCAT AGACAACTT GTGAATATAG      360
TGGATGACCT TGTGGAGTGC GTGAAAGAAA ACTCATCTAA GGATCTAAAA AAATCATTC A      420
AGAGCCCAGA ACCCAGGCTC TTTACTCCTG AAGAATTCTT TAGAATTTTT AATAGATCCA      480
TTGATGCCTT CAAGGACTTT GTAGTGCAA ATCTCGAG                                     518

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT ACCTTGATAC ATCAGCTGAC CTCATTTCG GATACCTTTT      60
CCCCCCCAGAA AAGTACAACA TCTGGGCCGC CCCAGCCCGA AGACAGATCG TCGCTCCCTG      120
GACAATCAGA CGAATTCTCC CCCCCCCC GCAGGAGGAG CCAATCCCCC GCTCTGCCCC      180
GTCGCACATT CGGCCCCCGC GACTCGGCCA GAGCGGCGCT GGCAGAGGAG TGTCCGGCAG      240
GAGGGCCAAC GCCCCTGTT CGGTTTGC GAACGAGCAG GGAGGTGGG GGCAGCGTCG      300
CCGGCTTCCA GACACCAATG GGAATCCCAA TGGGGAAGTC GATGCTGGTG CTTCTCACCT      360
TCTTGGCCTT CGCCTCGTGC TGCATTGCTG CTTACCGCCC CAGTGAGACC CTGTGTCTCG      420
AG                                     422

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCC TTCATGGCCT AAGAGATTAA GTGATTACT CAAGGTCATA TTCCTTGGAA      60
GTAGCAAAAC TTCTGGACCA GATTTCTGAT TCCAAAGGCG GTACTGCTTG TACAACACTC      120
TGAGAAGTAA TTAAGTGGA GCAAAGCAAA AAGAAGTCTA AAAGCAGGTG ATAGGTGTAG      180
ATTTAGATAG TGTAAGGGTA GGCTAAAGTG TTGTAACAAA TGCACCCTCA AGTAGGTAAT      240
GGCTCAAACA CAATAGATGT TCACTTCCCA CATCTCAGAG CAAATTGGGT TCTCCTCATC      300
AGCTAAAGCT TTCCTACATG GGATGATTGG GGGAGCAAGA CACTCCATCT ATGGCTCCCT      360
TACCCTCCAA GGCCTTCTTA TTGTCTTTAT GTAACCAGTG GAAGAGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGCCT TCATGGCCTA GGCTTCTTCG GAGCTGTGTA NTCTTAATTT GCTTTGCTGC      60
TGGCTGGCTG ACAGCTGATG GGGGACTCCT CANGACGGAC TCCCTTCCAG ATGCACCCAT      120
CTCCATCCTT CTCAACTCCC CAACCTTTGT CCTCCCCACT CTTCGCTCGC GCGGCGGTCT      180
GAGACCAACA GGACCAAGTT CAGGGGTTTC CTCTCCAGC GAGACTTGGC AGAACAGGCT      240
TTAAAAGCAA AGGAGGCAGC GGAAGACTGT GAATTCCTTT GGACAATTGA TGATATTAT      300
CATTGTGCCC AGTTTCTACA AATAAAAGAT GGGTGGATTA TTTTCTCGAT GGAGGACAAA      360
ACCTTCAACT GTAGAAGTTC TAGAAAGTAT AGATAAGGAA ATTCAAGCAT TGGAGAATT      420
TAGGGAAAAA AATCAGAGAT TACAAAATT ATGGGTTGGA AGATTAAATC TGTATTCCTC      480
AGTTCTCTAT CTGTTAACAT GCTTAATTGT ATATTTGTGG TATCTTCCTG ATGAATTTAC      540
AGCAAGACTT GCCATGACAC TCCACATCT CGAG              574

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT AGGCGCGGCC CGGGTTCCCG TTCCCCGCGG AGCCATGCGG      60
TACAACGAGA AGGAGCTGCA GGCTCTGTCC CGGCAGCCCG CCGAGATGGC GGCCGAGCTG      120
GGCATGAGGG GCCCAAGAA GGGCAGCGTG CTGAAGCGGC GGCTGGTGAA GCTGGTGGTG      180
AATTCCTCT TCTACTTTTCG GACAGACGAG GCCGAGCCCG TCGGAGCCCT GCTGCTGGAG      240

```

CGCTGCAGAG TCGTCCGGGA AGAGCCCGGC ACCTTCTCCA TCAGCTTCAT TGAGGACCCT 300
GAGAGGAAGT ATCACTTCGA GTTCAGCTCG AG 332

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC TTCATGGCCT AATTGCAAGA TCACGGAATC TCCTGAATCA TTAAGAAAAG 60
ATAAAATATC ACAAGCATCT TTAGTGTAT GTGTATTCAG TAATTCTTTG GAGTTGTATT 120
TATTAAGCTT ACCAGATTTT AAAGGCATAT AAAATGTGGT AAGATATGAG ACACATACTG 180
AAATATCAGT GCAAAGGGAG AATGGTAGTT GAATGGTCAG AAACGAAAAA GCCTCGAG 238

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC TTCATGGCCT AGAAGCATT TTTGTTATTG TGAAACATT TTATACTTTC 60
ATTATAATT GTTGAGCCTA GAGTTGGGCT ATTTGAATAT TTATTATGAT AATCTTTTGG 120
CTAATGGTAA CAGCATATCT TGTCTAACA AAATTACTGT TAACAGCAAT CGAACTCGAG 180

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC TTCATGGCCT ACTGAGATCC AGACCAGCTC CTCCAGACC TCTCCAGAAG 60
AAGCCATGGG AACCCCTCGT ATCCAGCATT TGCTGATCCT CCTGGTCCTA GGAGCCTCCC 120
TCCTGACCTC GGGCCTAGAG CTGTTTGTG AAAAGGGTCT GTCCATGACT GTGGAAGCAG 180
ATCCAGCCAA TATGTTTAAAC TGGACCACAG AGGAAGTGGA GACTTGTGAC AAAGGGGCAC 240
TTTGCCAGGA AACCATACTA ATAATTAAAG CAGGGACTGA GACAGCCATT TTGGCCACGA 300
AGGGCTGCAT CCCGGAAGGG GAGGAGGCCA TAACAATTGT CCAGCACTCT TCACCTCCCG 360
GCCTGATCGT GACCTCCTAC AGTAACTACT GTGAGGATTC CTTCTGTAAT GACAAAGACA 420
GCCTGTCTCA GTTTTGGGAG TTCAGTGAGA CCACAGCTTC CACTGTGTCA ACAACCCTCC 480
ATTGTCCAAC CTGTGTGGCT TTGGGGACCT GTTTCAGTGC TCCTTCTCTT CCCTGTCCCA 540
ATGGTACAAC TCGATGCTAT CAAGGAAAAC CTCTCGAG 578

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACATGAATCC ACTCCTGATC CTTACCTTTG TGGCAGCTGC      60
TCTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACAAC GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCCTGAATTC TGGCTACCAC TTCTGTGGTG GCTCCCTCAT      180
CAACGAACAG TGGGTGGTAT CAGCAGGCCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAGCAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCCAATA CG ACAGGAGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AGGGCACCAC TGAGTTCAGT ACTTCAAAAT TGCCGTGCTC      60
TACCTCTCCC CAGTGCACAA AAACACTCTC CACACCAAGC TGCTGCTGCT GGGGGATGGA      120
GGGATGGCGT CAGCGATTCA AGACTGTTTT TCCTACCTGT TCAGCACTTC TTTCAGCGAT      180
ATGAAGTTAA ATCCAGTCTT TCCCTGTCTC CAGGCATCAT CGCCATCAAC ATACAGCCAT      240
ACTCCAGGAT TGCCCATCTT CAACATAAAC GGACTCTCCT GGACTCCACT TCCCATATCA      300
GTCACAGCCA CACTTCCTGA GAAAGAAGTC TACACTCTTC ATTCACTTTC ATTCACCCAC      360
TGCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCCT AGAGAAAATA AAGAGTTATA TCAGAAATTT ACAAACATAA      60
CTTTTAAAT TTAAATTCG AAAATATATA TCATACGAAA ATGAAAATTA TAATCTTCT      120
TGGATTCCCTG GGAGCCACAT TGTCAGCCCC ACTTATCCCA CAGCGTCTCA TGTCTGCCAG      180
CAATAGCAAT GAGTTACTTC TTAATCTTAA TAATGGTCAA CTTTGGCCAC TACAACCTCA      240
GGGCCCCATT AATTCATGGA TTCCACCTTT CTCTGGAATT TTACAACAGC AGCAGCAGGC      300
TCAAATTCCA GGACTCTCCC AGTTCTCTTT ATCAGCTCTA GACCAGTTTG CTGGACTGCT      360
CCCAAATCAG ATACCCTTAA CAGGAGAGGC CAGTTTTGCC CAAGGAGCCC AGGCAGGCCA      420
AGTTGATCCC TTACAGCTTC AAACACCGCC TCAGACACAA CCAGGCCAC GTCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCCT GGGAAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTCAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCTGT TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```

GAATTCGGCC TTCATGGCCT AGAAAAAAGA AACTGTCGTG GATACTGTCA GTGTATATAT      60
TTATGTGGTA CCTGAGAGCC ACCCCAAATT AGATTGACTT TAGATCGTTT ATACAAAAAT      120
AGCTTGAAGA ACTGTTTTTT CCATGGTAAA TGCTTTTGAA TATTAACCTA GTTATGTTAG      180
ATTCCTACCT CAGTGGTACT GTCACAGCCA TTGGTTACAT TTCTGAAACC CTTCAGAGTA      240
AGAGTTTTGG TTTTTTGT TTGTTTTGTT TGTTTTTTGA GATGGAGTCT TGCTCTGTCG      300
CCCAGGCTGG AGTGCACTGC AGCAACCCAG GTGGAGTGCA GTGCAACCTC CACCTCCAG      360
GTTTAAGCGA TCCTCCTAAC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```

GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTC TCATTTCTCT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT AACTTGTGCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAACTTC      300

```

AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA 360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC TTCATGGCCT ACACCTTTCA CTTATCTTAT AGTCACTTAA TTCCTCTACT 60
CTTATCATTT GATATTTTCA TTTTATTGTG TATCTCTGTN NGGCCAAATC AATAGATTTT 120
GAACAATCTC AACTTAACC TTTTAAAAAA ATCTAATAGG CCCAGTTTCC TCTCAACAAT 180
CTTTGAAGAA CCTTCGAGAA AGGAGAAACA CAGACCTCCC GCTTCTAGAC ATGCACACTG 240
TAACCCGGGA AGAGGGAGAA GGCATGGAGA CAACTGATAC GGAGTCTGTG TCTTCCGCCA 300
GCACATACAC ACAGTCTTTA GAGCAGCTGC TTAAGTCTCC CGAACTAAA CTTGGTATGT 360
TACTCTGTCT AAATATGTTT TTCTTATTTA ATTTCACTGT CTTATTTAAT TACTANTACT 420
CTAAGTTACA TATGCTTTTT NGGGCTGCTC CAATAAAATT TCTTTCAATA TTCCACTACC 480
TGTTTGTATT AGGTTCTCTA GAGGGAACCT CGAG 514

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCT TCATGGCCTA GGTTTTCTGT ACATGGAGAT TAACTGTCT TCCAAAGTGA 60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC 120
AAGGGAAGAA AATCATTTC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG 180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT 240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCCTGGCG 300
ACCTGACGCT GCGGAGGCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC TTCATGGCCT AGGAACAGTG TGTGTTTTTG TGTGTGGCTT GCATTCTCTC 60
CTCCGTTTTT GGAGCAGCGT GAGATTATTG CAATGCTACA TTCTCTCCCT CTGCGCCCTC 120
CTACCCCATC AATGTCTCAT GGGTGGTGTG ATAGAGGCTA TGGGAGTGAA GACCACTGGT 180

GTTAGTCTGT GTATAGTTCC TGGGGTGTGG CGAGTACCAG CTCTGACAGC GGAAGAGAAC	240
TATACTGTTG ATTCCCATA TTCTCAGTAG GTGTGTTCTA TAAAATTGCT GCGAACACCA	300
AATTAGCGAA TCCTGAACCA TCGTTCCCAG AGGAATAGGG GGTIAGGGTC CTGTGATCCT	360
CAAGTTGCAA CATTGTCTTC GACTGATTAA TATGTAACCT TGTTTTATAT GTGCAATCTC	420
GAG	423

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

GAATTCGGCC TTCATGGCCT ACCGAAACCA AATAATTCAA GCACTGCTTA TTACAATTTT	60
ACTGGGTCTC TATTTTACCC TCCTACAAGC CTCAGAGTAC TTCGAGTCTC CCTTCACCCCT	120
CGAG	124

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

GAATTCGGCC TTCATGGCCT ACATCTATGA CTTTTTAAAC ATGCGGCGTT TTGTGAATAT	60
CATGATAATA ACAAGAGTCA ACAGGCTAAG TGAGAGGAGA GGGATGCTAC GCCTACGCTG	120
CCCCCACCAC GGCCAGCCCG CTTCTGCGCC TTGGTGTG GATTTTCTTT GTGATTTTAC	180
GGGGTTTTGT GTTTTTTTTT TCTGTGTTTT TGTTTTGTTA TTTTCTCTG TCCACTTGAT	240
TTGCATGCAA CACCACAAA AAGGAAACAC AAAACCCCGT CTGCTCGAG	289

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

GAATTCGGCC TTCATGGCCT AACTATGAG AGGACCGATT GTATTGCACA TTTGTCTGGC	60
TTTCTGTAGC CTTCTGCTTT TTCAGCGTTG CCACACAATG TCTGGCCTTC CCCAAAATAG	120
AAAGGAGGAG GGAGATAGCA CATGTTTCATG CGGAAAAAGG GCAGTCCGAT AAGATGAACA	180
CCGATGACCT AGAAAATAGC TCTGTACCT CAAAGCAGAC TCCCCAATG GTGGTCTCTG	240
AAGATCCAAT GATGATGTCA GCAGTACCAT CGGCAACATC ATTAATAATAA GCAAACTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```
GAATTCGGCC AAAGAGGCCT ATTTTITTTT CTGCAAACAC TGTGTATAGT GAGACTTGT 60
CTACTTTGGA GAACAGGTTA CCTTTTGAAA ATGAGGTTGA GTTCTTCCT TTCTGATGCA 120
TTGATTTTGG AAGATTTTIT TTTCCCCCTT CCCCTCTCCC TCGAG 165
```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```
GAATTCGGCC AAAGAGGCCT AGCTTCTTTG TATAATTAAA TCTGAGTTTT GTTTGAGCAT 60
CTTTCAACAT GTACCATATT TATGACAATT CTCTTCCATA GGATCTATCT GTTCTGCAAC 120
AAGTATTGAT CTTACAGTAA AATTTTTCAC AAATTCATTA GATTCTATGT CTCTTTTCT 180
GGTAGGAATT TTTGTGCAGG TAGCTATCTC TTGCCCTAGA TTATTCTCCT TGTTTAGCTG 240
CTGATTCTTA AACTGGCCTC TAGATTCCA GATTCTTCC GGTACAGACT TTCTCTTTGC 300
AAGTTCTTCC ATCTCTAATC TTTGAGATTA ATCTTCTTTT GAAATGTCCT GCTGCTCTAC 360
TCTTGATGTT CTCGAG 376
```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```
TCTCCAAGGG AAAATAAATG CTTTACTAT CTAGTTTGTG TCTTTGAGAA TTAAACTCT 60
TTTTTTTTTT TTTCATTCCA GTAGCTTTTG GGGTAGAGTT TGGCTCTTTG AGAATTGCAT 120
ACTAATTAAT TTTAGGGGTG ATTTGTACAT CATCTCTATA TTCCTGAAAC ACAGTAGAAA 180
CAGCCAGCAG TCAGGCAACC ATCTACCATG ACCATTAAAA CATCCCCAAA GTGAAACACC 240
AGATGTGATC TGCTAGATT AGTGGAGGCG GCTGGCTCGA G 281
```

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC AAAGAGGCCT AGCTAGNCTT GCTCAGCTTT GTGGATACGC GGACTTTGTT      60
GCTGCTTGCA GTAACCTTAT GCCTAGCAAC ATGCCAATCT TTACAAGAGG AAACGTGAAG      120
AAAGGGCCCA NCCGGAGATA GAGGACCACG TGGAGAAAGG GGTCCACCAG GCCCCCAGG      180
CAGAGATGGT GAAGATGGTC CCACAGGCCN TCCTGGTCCA NNTGGTCNTC NTGGCCCCCN      240
TGGTCTCGGT GGGAACTTGT CTGCTCAGTA TGACGAAAAA GGAGTTGGAC TTGGCCCTGG      300
ACCAATGGGC TTAATGGGAC CTAGAGGCCC ACCTGGTGCA GCTGGAGCCC CAGGCCCTCA      360
AGGTTTCCAA GGACCTGCTG GTGAGCCTGG TGAACCTGGT CAAACTGGTC CTGCAGGTGC      420
TCGTGGTCCA GCTGGCCCTC CTGGCAAGGC TGGTGAAGAT GGTCAACCCTG GAAAACCCGG      480
ACGACCTGGT GAGAGAGGAG TTGTTGGACC ACAGGGTGCT CGTGGTTTCC CTGGAACCTC      540
TGGACTTCCT GGCTTCAAAG GCAACCTCGA G                                571
```

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 453 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC AAAGAGGCCT ATGCGCAAGG ATCAAGCCGA CTACCTGTGC TGTCTACTGG      60
GACAGCAGTC TCCGAGCTAC TCCGTACCTC CCTCTGCCAG GTCGTGGAGT TAGGCCCCAG      120
TCCCTACTTG TCACTGGTTC CCACTGTGCT CCTAACTGTG CAGCACCTGG GAGCTCTGGC      180
CTGGGGCTGG AGGCCCTGGT AGGAGCTGCA GTTGGAGGCC GTTCTGTGCC CAGCAGCGGT      240
GAGCGGCTCC CATGGGCCCT GTGTCTGCAG GGAGCCAGGG CTGCGGCACA TGTGCTGTGA      300
AACTGGCACC CACCTGGCGT GCTGCTGCCG CCACTTGCTT CCTGCAGCAC CTCCTACCCT      360
GCTCCGTGTC CTCCTCTCC CCGCGCCTGG CTCAGGAGTG CTGGAAGAGC TCACGCCTCG      420
GCCTGGGAGC CTGGCCTCTT GATATACCTC GAG                                453
```

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAATTCGGCC AAAGAGGCCT ATGTCATGAG TGAACCTGGC AATTGCCTTG TTAAACCCAG      60
TTGGACATTA TCTTCCACAT TGCGAAGCTA TACATGTCTG ATATGTTCTG AAAGAATAGA      120
ATTTATAGTT AGATATACTA TTTTGTGATTA TTTACTCAGA AGGAGACATG TAATTATTCT      180
TATGTTGTCA TGAAATCTA TTAAATGCAT TTATATTTC AATCAATGTT ACGAAGTTCC      240
ATTATTATTA TTTTACAGAG GGAAGCCAA GATACAGGAG TGGAAATTAC TTGGCCTATC      300
GCTCGAG                                307
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

GAATTCGGCC AAAGAGGCCT AAGAAGATGA ACAAGCGCCA GCTCTATTAC CAGGTTTTAA      60
ACTTTCGCCA TGATCGTGTC TTCTGCACTC ATGATATGGA AAGGCTTGAT CGTGCTCACA      120
GGCAGTGAGA CCCCCATCGT GGTGGTGCTG AGTGGCAGTA TGGAGCCGGC CTTTCACAGA      180
GGAGACCTCC TGTTCTCTAC AAATTTCCGG GAAGACCCAA TCAGAGCTGG TGAAATAGTT      240
GTTTTTAAAG TTGAAGGACG AGACATTCCA ATAGTTCACA GAGTAATCAA AGTTCATGAA      300
AAAGATAATG GAGACATCAA ATTTCTGACT AAAGGAGATA ATAATGAAGT TGCTCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC AAAGGGGCCT ACCTGAAACG GCAGTCCGGT CCTCCGACA TTGTCCAGCG      60
GAAGGCCTGG GCTTCACACT CTGTGCCTCC CGGCGCTACC TGGCAGATG CCGAGCACAC      120
AGCAGATGCT CAATGAATGC CCAACCAACC CTATACCTGG CTTGGATCTC AAGCTCCCTG      180
GCCGGGGCCT GATGGAAGGC TTTGGGGGCA CAGGAGGCTG CCCCCTTGGG CGCCCCCGGC      240
CACCTCTTCG CCCTCGAATC TCAGGCAGCT TGGTCAGGAA CTTCTTCTCC ACGTATTTAG      300
CGTGAATCCA GGCCTCCTTC TCCTGCCTGT GGGAGGGGAG AAGCACGCAG TCTTCCCTCT      360
TCTGCTCCAG GGTCCCCCA TTCCCCTGGG AGGCTAAACC CATAGCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AGGGAGTGTT TGCCTTTCTT CTCCGTTTGG CAGTGAAACA      60
CATCTCAGAA AGGTGGAGCT GATCAGAATA ATGTTACGCA TCAACCCCTT GGAGAACCTG      120
AAGGTGTACA TCAGCAGTCG GCCTCCCCCTG GTGGTCTTCA TGATCAGCGT AAGCGCCATG      180
GCCATAGCTT TCCTGACCCT GGGCTACTTC TTCAAAATCA AGGAGATTAA ATCCCCAGAA      240
ATGGCAGAGG ATTGGAATAC TTTTCTGCTA CGGTTCAATG ATTTGGACTT GTGTGTATCA      300
GAGAATGAAA CCCTCAAGCT CGAG                                324

```

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```
GAATTCGGCC AAAGAGGCCT AGTGGGGCTG TATTTTAATA CAAGAAAGAC ATTGCTCTAG      60
AACATGGCTC GCCTTTGCTT CAGGGCCTAG CAGTTTATTT TAGCCATAAG GGTAAGGGAG      120
CAGGTCAGAA ATGACTTTTA GTGTAATCCT ATCTGTAATT AAAAATACAA ATGCTGTCAT      180
AAGATCAAAT GTTATCAAAA ATCAGTATTT AAAATTAAAT TTACCCCCAA ATTTCTTTCA      240
AAAAAGTTGT AATGTTCTTT TTCAGTGAAG CCTTGGCACT GCTAGAGCTG AAGAATGTGA      300
TCAATCGGCT TGTTGAATAA TCCCGCACAG TAGGTATTCC GCTGAAGCCA ACTCTAGCTG      360
GGGCTCGAG                                     370
```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```
GAATTCGGCC AAAGAGGCCT AAGAAATAGG ACTATACAAA TTTCAACTT CTTTGATAT      60
CAGTTTGGT AAGATGCATT TTTCTTCTGA GAATTTGTTT CATTTGAATT TCCAAATTTA      120
TTAGCATGAA GTTGTAATA AAAATCTTAT ATTTTACTC AAATTTTGAG ATAGTTGTAG      180
ATTTACATGA AGTTGTAAAG AATAATAGAA AGATCCTGTG TACCTTTTCC CAGTTTTCCC      240
CAAAAGTAAC ATTTGCATA ACTCTAGTAC AGTAGCACAA CTCGAG                                     286
```

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 310 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGCAAACCG TGTACTAAGC ATCAGTGCAG AGATAGTGAA      60
TGAGACACAG TATTCCCACC TTTGAGCAGT GCCAGTCTAG TATTAGAATA TTTTGGCTA      120
AAAAATTATT TTGAAGCATA AAGAAGCTTT TGTTTGCTCT GGTGATTTTC ATAACATATT      180
CACATTCTTA ATGTATTTTT GGTTTTTCAG AAAGTACTT CTGGCCTGTG TTCTTTCAGA      240
ATATAGGTTG CAGCTTGTGT TAAGTGCAGG AACTATTGAT AGACTGAGTT TAGAAGAAGG      300
GAAACTCGAG                                     310
```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT AGGACTTTGG GGCAGGTGAT TAAATTTATA TAGGTACCTC      60
AAGAAAAAGA ACCTGAATAT GCTGCATTTT CTTTCTTIAG CTTTACATG TAGCATTTTG      120
TTTGCTTTT GTTATTTTGG TTTTGATATA TGCTTTTGG ACCCCAATAG ACTGTTGAAA      180
GAAATTTAAA AATTACTCTT GTAGGGATAT AGTATCCTTA AAAAATAAAA ATTAATAAAA      240
ATTTAAAAAA ATTGCTGCAA TATCTGGCTC GAAGGTTGCC CTATATTAGA ATAATACTTT      300
AGCCAAACAC ATCAGCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 550 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGGCCT TGTGATTCTG CAAAGGAGGA ACAATAATTC ACTGTTTCCC      60
AAACTTATCT GACCATAGAA CATATNTCTC AGAGTATTTT TCAAGAGTAG TATTTTCTGT      120
AATATATGAT GAAAAATAAT CGTATCGGCC ATCTTTGTAC ATAAGGTCAA AATGTCAGCC      180
AGCCCTGAAA TAAATGCAAG CCAAAGGTA GAGAGATAAG TGAATAAAGC TGGCACACTG      240
TCAGTCCGGA GTACCATGCT GCATTCTGAG TCAAGCTCCA GGAAACTGAG CTAGGGTTTG      300
TCTCTAAGAA GAAAACTGG AGCGTCCAAA GCTTCTGGAT TCCATTTAAT TAAAACCCCTT      360
TTAAATTAAA TCCTTGTAAC TGAAGAGTAT CGGTGGATGA AGAAAAAATA GTCTCACATG      420
TCTTCATTTT CATCCTTGGC TCAGTACAGC TCCAGTTCCA TTATTCTTAA ACATCTATTA      480
ACATGATTGC TAAATAATTA CACAGGCTAA CTGCCAAGCA TTTTTCACAG GAAGCAAGGC      540
ACTGCTCGAG                                     550
```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 301 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```
GAATTCGGCC TTCATGGCCT AGTTAAGTGG GAAGTTAAAT GGCAAGTACT AGAATGCCAC      60
CTATGGCAAG CACTAGAATG GTCTAGGTGT GAAATGAGGG AGTAATGTCA GGGAGTCAAG      120
GTGGCCATCC ATAGCAGTGA TTCTTATCTG GGGTAGGGGG TGAATTTTCA GTGGAGGGAG      180
GTCTCTGGAC ATGGACCCCC AGGCAGGGCT ATCCAATCAT CTGAGGGGTG AGCAGTGTTC      240
AGCTCAGTAA AAGTAAGGGA AAAAAATAG CAGTCTCTAA AAGGAACATA GAGCGCTCGA      300
G                                     301
```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```
GGGGAGAGCA TCAGGAAGAA CAGCTAATGG ATGCTGGGCT TAATACCTAG GTGATGGGAT      60
GGTCTGTGCG GCAAAACACCA TGGCACAAGT TTACCTATGT AACCTGCACA TCCTGACATG      120
TACCCCTGAA CTTAAAATGA AAGTTGGAGA CCAAAAAACA AAACACCATA AACTACAAA      180
ACTTCTTAA CAATAAACTA GTAGAAAATT TCTAAAATAT ATAATTCAAG AATTATATAA      240
GAGCTCTTTT TATATGTAAA TATAAATTTA AATACAAGAG AAACATCTAA AACAGGTTGC      300
TTCTGAGAAA CGTGACTGGT TATTAAGAAG AGGTATATAG GGGCTCACTC GAG              353
```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```
CATTATTAA CCTTTTAAAC AATCAAGAGA TTGCTTTTAA AATTGTCTCT AAAAAGGTTT      60
GATTTTTTAC GAAAGAGAGA GCACTTGAAT ATATCTTTAT GTACCACCGT GTCTCTTTTT      120
GTTAGATTTT TCATCTGTGG GTATAATATA AAATATTCTT AAAATGAAAG CTTTACGCTT      180
GTGTTTGAGA CTAAGCAACT TGCATTGTGT CATGACCCTT CTAATACCAC AAACCCTCGA      240
G                                          241
```

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCT TCATGGCCTA CACTCAACCA CTGAAAAAGC TGAAAATCAA TGTTTTTAAG      60
GTTCAACAAGT GTGCCGTGTG TGGCTTCACC ACCGAAAACC TGCTGCAATT CCACGAACAC      120
ATCCCTCAGC ACAAAATCGGA TGGTTCTTCC TACCAGTGCC GGGAGTGTGG CCTCTGCTAC      180
ACGTCTCAGC TCTCTGTGTC CAGGCACCTC TTCATCGTAC ACAAGTTAAA GGAACCTCAG      240
CCAGTGTTCA AGCAAAATGG GGCTGGGGAA GATAACCAAC AGGAGAACAA ACCCAGCCAC      300
GAGGATGAAT CCCCTGATGG CCCCTCGAG              330
```

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GCGGGCACCA	TTTCCAGTAT	GTACCAAACC	AAAGCCGTCA	TCATTGCAAT	GATCATCACT	60
GCGGTGGTAT	CCATTTCAGT	CACCATCTTC	TGCTTTTCTAGA	CCAAGGTGGA	CTTCACCTCG	120
TGCACAGGCC	TCTTCTGTGT	CCTGGGAATT	GTGCTCCTGG	TGACTGGGAT	TGTCCTAGC	180
ATTGTGCTCT	ACTTCCAATA	CGTTTACTGG	CTCCACATGC	TCTATGCTGC	TCTGGGGGCC	240
ATTGTGTTCA	CCCTGTTTCT	GGCTTACGAC	ACACAGCTGG	TCCCGGGGAA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GCCAGACTAC	CACAAGCCCC	ACCCACACTA	TGCCAAGCCC	TACCCATACC	ACAGCAAGCC	60
CCACTCATA	TTCCACAAGC	CCCACCCATA	CCCCCACAAG	TCCCACCCAC	AAAACCAGTA	120
TGTACCTCC	CACCACTACA	AGTCTACCC	CCAGTGGTAT	GGGCCTAGTC	CAGACTGCCA	180
CAAGTCCAC	CCATCCTACC	ACAAGCCCCA	CCCATCCAC	CACAAGCCCC	ATCGTTATAA	240
ATGTAAGCCC	TTCCACTTCT	CTAGAAGTTC	CTACCCCTCTC	CAGCCCTCC	AAACACTCAG	300
ACCCACCCCT	CCCAGGCAAT	GACTCCCTTC	CCTGTAGTCC	CCCAGTCTCC	GATTCCTACA	360
CTCAGGCAGA	CCCTATGGCC	CCCAGAACTC	CCCACCCAAG	TCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

ACTGAGCTCA	AGGACCCCTC	CAAGAAGAAG	ATGCAGCACA	TCTCCAACCT	GTCCATCGCT	60
GTCATGTACA	TCATGTACTT	CCTGGCTGCC	CTCTTCGGCT	ACCTCACCTT	CTACAACGGG	120
GTGGAGTCGG	AGCTGCTGCA	CACCTACAGC	AAGGTGGACC	CGTTTGACGT	CCTGATCCTG	180
TGTGTGCGCG	TGGCCGTGCT	GACAGCAGTC	ACGCTCACAG	TGCCCATCGT	TCTGTTCCCG	240
GTGCGCCGCG	CCATCCAGCA	GATGCTGTTT	CCAAACCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC	TTCATGGCCT	AGTCAAGCTA	GGTAAGCTAA	AAAGAAGAAA	ACCTGGTTAC	60
AGCCCGGTGA	ATTGATTTT	TTCCAGCCGA	GAAATAGATA	TTTCTCTCAC	ATATATTTGG	120
AAAACTTTAG	TCATCTTCAT	AAAACTTAAA	AAGTTACCTA	AGCACACACA	GCAAGTTTCT	180
CCTTTCTTCC	TTTCCACAC	CCTTACCAGT	TCATATGTT	TCTACCAATC	CAGTGCCCGAG	240
TTGCCAATGA	TGTTGCTCTC	ACATGAATTT	ACTGCATTCC	CTTCTGGTTC	CCCAGAAGGT	300
CTTGAAGAAA	GAGGTTTCAG	CTAGTGGACC	CAAACAGAAT	TTCTTGGCTG	GTGATACTCA	360
GATTGTGTTT	AGAGCCTGGT	ATGAAGAAGG	GGCCAGGTGT	AAGAAGTAGT	TAATCAACTG	420
CACGTTGATT	TCAGGCTGAA	TATTCAACCA	TCTGCAGCCA	CCCCTCTCTA	AAAGTCTAGC	480
TGAAGCACAA	TTGATTGTGC	CATAGAATGA	GCAAACGCTT	GAAAACACAA	GCTCGAG	537

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GCGAGCTCGT	GTTTTAAAGG	ACCAAATAGA	AGTTTACCAG	GAGAGAAGTG	ACAGAAGTGC	60
TGTCTAGATA	GAGGAAGGGC	ACACACAGAT	GCAAGCATGT	GCAGAAATGA	GCAAACCACT	120
GAGACGCTGC	CTTGAGCTCT	GTGTACACT	GCTATGTTGC	AGCCTGGGAG	GCTGTTCCCA	180
GTTGAGCCCT	TCGGAACCAG	CCATGAGATG	GCACGGGTAC	GCGGAAGGGA	GCAGTCTCCA	240
TGGCTGGGTG	GTGATGGGGG	CTTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GATGGCTCCC	CAGAGCCTGC	CTTCATCTAG	GATGGCTCCT	CTGGGCATGC	TGCTGGGGCT	60
GCTGATGGCC	GCCTGCTTCA	CCTTCTGCCT	CAGTCATCAG	AACCTGAAGG	AGTTTGCCCT	120
GACCAACCCA	GAGAAGAGCA	GCACCAAAGA	AACGGAGAGA	AAAGAAACCA	AAGCCGAGGA	180
GGAGCTGGAT	GCCGAAGTCC	TGGAGGTGTT	CCACCCGACG	CATGAGTGCC	AGGCCCTTCA	240
GCCAGGGCAG	GCTGTCCCTG	CAGGATCCCA	CGTACGGCTG	AATCTTCAGA	CTGGGGAAAG	300
AGAGGCAAAA	CTCCAATATG	AGGACAAGTT	CCGAAATAAT	TTGAAAGGCA	AAAAGCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GCCACAATAG	CGGGATTGAT	CTCCTTAGGA	CCTATCTTTG	GCGTTGCCAG	TTCCTTTTAC	60
CTTTTGTGAG	TTTAGGTTTG	ATGTGCTTTG	GGGCTTTGAT	CGGACTTTGT	GCTTGCAATTT	120
GCCGAAGCTT	ATATCCCACC	ATTGCCACGG	GCATTCTCCA	TCTCCTTGCA	GGTCTGTGTA	180
CACTGGGCTC	AGTAAGTTGT	TATGTTGCTG	GAATTGAACT	ACTCCACCAG	AAACTAGAGC	240
TCCTTGACAA	TGTATCCGGT	GAATTTGGAT	GGTCCTTCTG	CCTGGCAGAA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC	TTCATGGCCT	AGGATGTAGA	ATCCTGCTTA	TCTGTGAAAT	GCAGTTGACA	60
CATCAGCTGG	ACCTATTTC	CGAATGCAGG	GTAACCCCTC	TGTTATTTAA	AGATGTAAAA	120
AATGCGGGAG	ACTTGAGAAG	AAAGGCCATG	GAAGGCACCA	TCGATGGATC	ACTGATAAAT	180
CCTACAGTGA	TTGTTGATCC	ATTTCAGATA	CTTGTGGCAG	CAAACAAAGC	AGTTCACCTC	240
TACAAACTGG	GAACAATGAA	GACAATGAAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

TCGTTCCCTT	CATCTCTTCC	CTTGCCAGAG	CAGGGACTCT	CTCCATATAA	ACAAAAGGAA	60
AACCACTGGC	CAGGGTATGG	TCAATACCTC	AACATATCCA	GACATCACAG	CACCAGAACA	120
CCAGTATGTA	TATTCCACAA	GTACTCGAG				149

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GCAATCAGAT	AAAGAAAGAC	CTGGCTGACA	AGGAGACACT	GGAGAACATG	ATGCAGAGAC	60
ACGAGGAGGA	GGCCCATGAG	AAGGGCAAAA	TTCTCAGCGA	ACAGAAGGCG	ATGATCAATG	120
CTATGGATTG	CAAGATCAGA	TCCCTGGAAC	AGAGGATTGT	GGAAGTGTCT	GAAGCCAATA	180
AACTTGCAGC	AAATAGCAGT	CTTTTACCC	AAAGGAACAT	GAAGGCCCAA	GAAGAGATGA	240

TTTCTGAACT CGAG

254

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```

GACAGCCTGG AAGTTTGGAG ACCCTGACAC ACCCACCTTC TCACCTGGGC TCTGCGTATC      60
CCCCAGCCTT GAGGGAAGAT GAAGCCTAAA CTGATGTACC AGGAGCTGAA GGTGCCTGCA      120
GAGGAGCCCG CCAATGAGCT GCCCATGAAT GAGATTGAGG CGTGAAGGC TCGGAAAAG      180
AAAGCCCGCT GGGTCCTGCT GGTCTCATT CTGGCGGTTG TGGGCTTCGG AGCCCTGATG      240
ACTCAGCTGT TTCTATGGGA ATACGGCGAC TTGCATCTCT TTGGGCCCAA CCAGCGCCCA      300
GCCCCCTGCT ATGACCCCTG CCTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```

GCCTGGAACC TGATTCTCCT GACCGTCTTT ACCCTGTCCA TGGCCTACCT CACTGGGATG      60
CTGTCCAGCT ACTACAACAC CACCTCCGTG CTGCTGTGCC TGGGCATCAC GGCCCTTGTC      120
TGCTCTCAG TCACCGTCTT CAGCTTCCAG ACCAAGTTCG ACTTCACCTC CTGCCAGGGC      180
GTGCTCTTCG TGCTTCTCAT GACTCTTTTC TTCAGCGGAC TCATCCTGGC CATCTCCTTA      240
CCCTTCCAAT ATGTGCCCTG GCTCCATGCA GTTTATGCAG CACTGGGAGC GGGTGTATTT      300
ACATTGTTCC TGGCACTTGA CACCCAGTTG CTGATGGGTA ACCGACGCCC GCTCGAG       357

```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```

GCGGGCTGCA GAATGATAGA CGAGCTCAAC AAAACGCTGG CCATGACCAT GCAGAGGCTG      60
GAAAGCTCTG AGCAGCGGGT CCCCTGTTC ACTTCTTACC ACAGCTCTGG GTTGCACTCG      120
GGTGATGGGG TCACCAAAGC AGGACCTATG GGCCTTCCAG AAATAAGACA AGTGCCAACT      180
GTTGTGATTG AATGTGATGA CAATAAGAA AATGTGCCTC ATGAGTCAGA CTACGAAGAC      240
TCTTCTTGCC TGTATACAAG AGAAGAGGAG GAAGAGGAGG AGGACGAAGA CGACGACGAA      300
CTCGAG                                     306

```

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

AATCAATCAA CTAGGCATAT GACACAGTAG TCCATTATAA AAGAAGACAT ACATCCAGCA      60
CCATCAACTA ATTCTTAAGA TAAGTTATCT GGGAAAATTG AAGAACAAAT AAATTCAACG      120
AAATACTGTA AAGTGAACGA AGACATAAAA CCAAAGAAAA CTGAGGCCAT TTCTGCCAAG      180
AAAGGAACAG CAAAGAGTAA AGATGAAAAA TATTCTAAGA TAATACCAGA AAAAGATAAT      240
TCCTACATGG ACAAAGATGA GCATGGTTCA TCCTCTGAAA GTGAAGATGA AGCGCTGGGT      300
AAATATCATG AGGCCTTATC CAGAACACAC AATTCGGGAC TACCACTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

AAGTTAAAGG TATTAAATAA ATGAGTTTCT CCTTAATTTT GTTAATGCTC TTTTAGCTAA      60
TAAGACTTTT TCTAGAGTTA CATATTTTAA TCTGTTTCAT TTTTATTTTT TCCTTTGGTT      120
TTATATTTTT AAAAGCCATT ATATCCCTCC CACTGGTAAC ATACACATAC ACAGACACAC      180
ATCTATTTC AATGAATACT TACTACTTTA TCATTTCAG TCTTAATTGT ACT              233

```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GCGGCGCCGC AGCAGTTCCA GGAAGGATGT TACCTTTGAC GATGACAGTG TTAATCCTGC      60
TGCTGCTCCC CACGGGTCAG GCTGCCCCAA AGGATGGAGT CACAAGGCCA GAATCTGAAG      120
TGCAGCATCA GCTCCTGCCC AACCCTTCC AGCCAGGCCA GGAGCAGCTC GGAATCTGTC      180
AGAGCTACCT AAAGGGACTA GGAAGGACAG AAGTGCAACT GGAGCATCTG AGCCGGGAGC      240
AGGTTCTCCT CTACCTCTTT GCCCTCCATG ACTATGACCA GAGTGGACAG CTGGATGGCC      300
TGGAGCTGCT GTCCATGTTG ACAGCTGCTC TGGCCCTGG AGCTGCCAAC TCTCCTACCA      360
CCAACCCGGT GATCTTGATA GTGGACAAAG TGCTCGAG                          398

```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

```
GAATTCGGCC TTCATGGCCT ACACCCAGCC AATTTTTTTG TATTTTGTAGT AGAGACGGGG      60
TTTCACCATG TTAGCCAGGA TGGTCTCTAT CTCCTGACCT CATGATTGTC CCGCCTCGGC      120
CTCCAAAAAA AGAACATTTT ATATTGAGT GCTATTTCTT TTGCGGCACC AAAACTTTAT      180
AACACACTGC CTTCTGAATT TTTTTTTTTG GTTCTGCTC AGCTCATTGT TAATCATATT      240
GTTCCCATGT ATGTCATGAG TTATTTTCTT CCTAGTCTTT TCAAAATTTT CTGTGCTTTG      300
ACTTTTAACA GTTTAATTGT AACAGTGTAT ATCTTTAAAG TTAAATTCAT GCTTGTGAAT      360
TTTTATAAGA GCCACAAAGG CCTTCCTCTG TGTTTTGTGT TTGTTTTTGT TTTGTTTTTC      420
ATTTTTGAGA CAGGCTCTCA CTGTCCCTCA GTGCTCTCG AG                                462
```

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

```
TGGACAGTCT AGAAGATGCT GTGGTGCCCC GGGCTCTGTA TGAGGAGCTG CTGCGCAACT      60
ACCAGCAGCA ACAGGAAGAG ATGCGCCACC TCCAGCAGGA GCTGGAGCGG ACTCGGAGGC      120
AGCTGGTACA ACAGGCCAAG AAGCTCAAGG AGTACGGGGC ACTTGTGTCT GAAATGAAGG      180
AGCTCCGTGA CCTTAACCGG AGGCTCCAGG ACGTGCTGCT CCTGAGGCTT GGCAGCGGTC      240
CCGCCATTGA TCTGGAAAAA GTAAAGTCAG AATGTCTCGA G                                281
```

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

```
AATGGAAC TGACACAAT ACTCGTGTA CTGTGTGGAA CCGCATAATC CCAGCAATGG      60
CACATTGAAG GAATGGAGGG AATCCAATAT TTCTGCCTCT GACATAATTT GGGAGAACCT      120
AACTGTGTCA GAATGCAAAT CATTGCATGG AGAGTATGTT GGACGGGCCT GTGGCCATGA      180
TCACCCATAT GTTCCAGATG TTCTATTTTG GTCTGTGATC CTGTTCTTTT CCACAGTTAC      240
TCTGTGAGCC ACCCTGAAGC AGTTCAAGAC TAGCAGATAT TTTCCAACCA AGGTTTCGATC      300
CATAGTGAGT GACTTTGCTG TCTTTCTTAC AATTCTGTGT ATGGTTTTAA TTGACTATGC      360
CATTGGGATC CCATCTCCAA AACTACAAGT ACCAAGTGTT TTCAAGCCCA CTAGGCTCGA      420
G                                421
```

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

```

AAGCCAATGG CTGGTCGTGA TCCTGAATGC CAACGCACAG AAATGATTAA GAAAGAAGAA      60
GAACGTTTGA GGGCTTCCAT ACGTAGGGAA TCTCAGCAGC GCCGAATGAG AGAGAAACAG      120
CACCAGCGGG GGCTGAGCGC CAGTTACCTG GAACCTGATC GATACGATGA GGAGGAGGAA      180
GGCGAGGAGT CCATCAGCTT GGCTGCCATT AAAAACCGAT ATAAAGGGGG CATTCGAGAG      240
GAACGAGCCA GAATCTATTC ATCAGACAGT GATGAGGGAT CAGAAGAAGA TAAAGCTCAA      300
AGATTACTCA AAGCAAAGAA ACTTACCAGT GATGAGGTAA GACCAAATTT ATTCAATTCT      360
AGGGGTTTAT CCTGTAATCA GGAGCCAAC TCTTTGAATG AAAAGCTCAC ACTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

```

CAAGCATACA ATCAACTCCA AGCTCGGTAT CACCTGAGCC CAGGAAGTGG AGGCTGCAGT      60
GAGCTATGAT CAGTAAAACA CAAGACAGGT TCACTGGGTC CCATCCCAAC CCGGACCAGC      120
TCCCTAGTAT AACAACTCAC ATGCATGTGG ACTATACCCT TACAGCCTTC TTCTGTGTGT      180
TTATGTGCAT ATATGTAGCC ATAGGAAAAA AAATCAAAAT CCTTGGTGT TCTTTCTTAT      240
TTTTTCAAAT ATTTACCTG CCCCATTTCT TTTCTTTCT CTTCTAGTA CTCCATTGCG      300
ATGCAGTTCT CGAG      314

```

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT      60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTT AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGTCTGT CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAAACCAA GTTCTGCGTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA      360
G      361

```

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCG ATGCACCGAA AAGGGTGAAG TAGAGAAATA      60
AAGTCTCCCC GCTGAACCTAC TATGAGGTCA GAAGCCTTGC TGCTATATTT CACACTGCTA      120
CACTTTGCTG GGGCTGGTTT CCCAGAAGAT TCTGAGCCAA TCAGTATTTC GCATGGCAAC      180
TATACAAAAC AGTATCCGGT GTTGTGGGC CACAAGCCAG GACGGAACAC ACTCGAG          237

```

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC TTCATGGCCT ACTTTATTTT TTTAATTATT ATTAGTATTA TTTTGAGACT      60
GAGTCTTGCT CTATACCCA GGCTGGAGTG CAGTGAGCTG AGACTATGCC ACCGCACTCC      120
AGCCCGGGCG ACAGAACGAG ACTCCATCTC NAAAAAAAAA AAAAAAATCT ATGTTTCATGC      180
CTTNACACCT GTTTCGTGCAC ATAGCTGTGC AGTATATTCT TCTTCTAAGC AACGACCCAG      240
TGAAGATCCA AACAAAAGTT CACAAATATG TAGTTATCCA AGGCACCTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACAATCTTTT AACTTTGGGG GTCACAGTTT TAGCCACCTT      60
TCGGGGGGTG ACTGGAGCAG TAGGAGGTGT GGGGTCATT TATGAATATA ATAAATGGA      120
GCTGACTGTA CTCGAG                                136

```

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

GAATTCGGCN TTCATGGCCT AAAATAACAC ACAATTAGTA TAGAAAAATT GCAAACACAG	60
ATAAAAGTCC TTTCCTGTG AATTCTGAA TGCACCTTG AATATTCACA TCTTACTGCC	120
AAAATGAGAT TGTCTTGTG GCCGTTCTGG AATTGCTTT TTCCAGCTT ACATGTTCTA	180
GGTCCTTCCA GATCAATAGC TGCACTCCCT CCTTCCTCTG CTGGTTTCTC AGCTCGATGG	240
GCTGTAAGTG GCATTACTCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

GAATTCGGCC TTCATGGCCT ACAACCTCAT AAATCTCATT CTTAATTTC A CTCTAGGACA	60
GAATTATTGT AGCACCTGTG TTCTGTTATT TTAGATTCAT TTAACTTAC CTAGACACGG	120
GTACTGTGGT AGTTGTAGAG GTACAGATGT TGAGTTCCCA TCCTCCTGGC TTAATGTCAC	180
TGGGGTTATT AATACACTTC ATAAGCATT TAGGGACACC TGCTGTCTGC TCAACCCCA	240
GCAAACCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GAATTCGGCC TTCATGGCCT ACATCTGGTA AATTTTCTT TCTGCCTGAG GAACACCCTT	60
TAGCATTTAT TTAGTCTGCT GGTGACCAAT TCTCATATT TGTTGTCTG AAAAATACCT	120
TTATTTGTT TTAATTCTTG AAAGATATT GCACTGGTGT GATTGGATTC ATGATTGCTT	180
ATTATTTTCT TTTTCTTTT TCTTTTGA GACAGAGTCT CGCTGTCGCC CAGGCAGGAG	240
TGCAGTGGCC CGTACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GCTCTGAATC TATTTCTAG GACATTTTT TCCCATTTAG ATTAAGCCAG AGAGAGCCCT	60
TTCTTGCCTC CCAAGAGTTT TTCTTGTGT GACTGTTGGT ATTCTGAACC TCTTGATT	120

GATGCCTGGA ATTGTCCTAG AGACTCTCCT GATTTCTGTC TCATTCTTTG ATTTACCCCT 180
 GGGGAGCTGG GGAAGAGATA CCTTCCCATG GCATCACTTG TTAAGAGTGG ATCCCCCTTC 240
 CCCCTTTCCT TCTGTCCCCC TCGAG 265

(2) INFORMATION FOR SEQ ID NO:299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC TTCATGGCCT ACCAAAACAA AAGAAGAAAT CATTTCACTC ATGCTTAGAA 60
 AGATGTCAAG AGGATGGAGG ACTCACATTC TGTTAACTCT TCTGCCTGTA ATATATGCTT 120
 TAAACACTAA AAATGATGAG CATGAATCTG CAATTCAAGC CCTCAAAGAT GCTCATGAAG 180
 AAGAAATTCA ACAAATTCTT GCTGAAACAA GAGAAAAAAT ATGTCAGTAT AAAAGCAAAG 240
 TAACAGAGGA GCTAGACCTT AGAAGAAAGA TTCAAGTTT AGAATCATCA TTAGAAGATC 300
 ACAATCTCGA G 311

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GCGATTGAAT TCTAGACCTG CCTCGAATC GTGGCCTCAA GTGATCCACC TGCCTCACCC 60
 TCATCACCTG CCAAGTCCTA CCCATTCTAA CCCTGATAGC TCTTAAATCA GGTCTTTCCA 120
 CCTCAACCTC ATTATCACTG CTCTAGAGCT CAAGCCTTCA GTGTCCTTTC ACTTCCTGAA 180
 TTTACTGTCT TAGTGCTCTT GCTCACATTG TATTCTNTGC CCAAATGCT CTTACCACTC 240
 CCNTTCTTTC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC TTCATGNCCT ACTTGGATTT ATCACAGTAG CATTGTCTT CAATCTGTGT 60
 GTTAACTAGA AATCAAGGAA AGACATGAGG AGATTGTCT ACTGCAAGGT GGTCTTAGCC 120
 ACTTCGCTGA TGTGGGTCTT TGTTGATGTC TTCTTACTGC TGTACTTCAG TGAATGTAAC 180
 AAATGTGATG ACAAGAAGGA GAGATCTCTG CTGCCTCCAT TGAGGGAGAT CCGCACGCAG 240
 CTGGTGGAGC AGTTCAAATG TCTGGAGCAG CAATCAGAGT CGCGACTGCA GCTGCTTCAA 300
 GACCTCCAGG AGTTTTTCCG CCGGAAAGCT GAGATTGAGC TCGAG 345

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```

GAATTCGGCC TTCATGGCCT AATCCTCCAG ATTATTATGG ATATGAAGAT TATTATGATT      60
ATTATGGTTA TGATTACCAT AACTATCGTG GTGGATATGA AGATCCATAC TATGGTTATG      120
AAGATTTTCA AGTTGGAGCT AGAGGAAGGG GTGGTAGAGG AGCAAGGGGT GCTGCTCCAT      180
CCAGAGGTCG TGGGGCTGCT CCTCCCCGCG GTAGAGCCGG TTATTCACAG AGAGGAGGTC      240
CTGGATCAGC AAGAGGCGTT CGAGGTGCGA GAGGAGGTGC CCAACAACAA TGATCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```

GAATTCGGCC TTCATGGCCT AAAAAAAGA AGTTTATTTA AAGAACTCT ATAAGAGCAG      60
CTTGGATTTT ATATCTTTAG ATCCAGAGTT TTTACTTTTC TGGAATTAAA TATAATTGTT      120
TGGAATTTAC TCTTTATTGT TGAATTTTAA AGCGTGACTA AAGTAGTGCT TCTTAAGATA      180
ATTGTCATGT GTTTTGTTT TGTTTTGTG TGTTTTGTG TGCTGAGTGT TGCTCTGTCT      240
CTCAGACTGG AGCTCGAG                                258

```

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```

GAATTCGGCC TTCATGGCCT ACAATTCGGA TAAAGTTTAA GGTGAGCTGA TGAAGAACAC      60
TCAAACCAAA GTCGCCCATT GGAGGAGCGC CCTACCTCAC AGGAATAGGC CTGCATTATT      120
AGTATACCTT CTTCAATTCAG TTATTGTTAT TCCTATGGAA ACAACCCATG GGAAATGTAG      180
CCTTGGCATG ACTGTATCAA TGGATTCAGA GAGCAGTAGC GGGGACCCCC CCAGTCAATT      240
ACGTTCCACA GCAAGTCTCG AG                                262

```

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC TTTCATGGCC TAAATCTCAT AAATAGAAAG NAAAATAATC TAGAAATTTT	60
TCAAAGCTAG TACTCTTTCT CCTTATAAAT GTACACAATT TTAATCTTTT TACAAATTTA	120
TTTAACTGTA CCTACTGTAC TTATTGTAGA TTCAATGACG CAGTTAAGTC ATCACCCAAG	180
GATTATGAA TTTGAGATTG CTGACCTGTT TTCTTCATAT TGCATTACA TCAATATTTG	240
TGAATTTGTT GTTCAGCTTT TCATTCAAAC AAAAAATATT CCCCCAAGAA AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GCGATTGAGT TCTCCCTGCT GGTTCCTTTG AATCACACCA AATGAATGGC TTGCTACTGT	60
TCCCTCACAC CTTTCATATTG TCCATGGTTT TTCCACCTC CTTAGCTATA CAGCTGCTGT	120
TCCTCCTGCC TAAATGTCT GAACATTCCC TCAGTGTCA GCTCAGCCCA CATCTTACAT	180
CTTCCCTAAG GATGTTTTTC TGCTGCTATC ATTCATTTTC TTCCTATGAG TTCCTCTGTT	240
ATATTGCGCC ACCGAACTC GAG	263

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAAGAC	60
CCCCCGCCAG CTTCCACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC	120
AGCTTGCCCTG CCCTTCCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCCT TCTTCCTCC	180
ACCCCTCCAT CCCCCAATGC TTGTAGACCT TCCATTCAAT CCGTCTCATC GTGCGTGGTC	240
TCTGATCGTC CATCACCTGA CCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GAATTCGGCC TTCATGGCCT AGCCAAAATC ACAAGAAAAA TAACTTTGAC TTGAAAAACA    60
AATAAGTTAG AAATGCAGTG TTTGCACTTC GTGGTTTATG TTGCTTTGG TGGCCTCTCA    120
TTCCCACTTA GCCTCAGTCT CCAGGGCCTG GGCTCCACCA AGGAAGACTC CATCTGCTCT    180
CTCTATTTGC AACTTGGGAA CTTTTTCCC CAAGGTACAG GATATGATTC AGGTTTATG    240
GATGACCTCC CACCCCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCT TCATGGCCTA CCTATCCCA AACTTTAAAT GTTGTCTACC AAATACTGAC    60
AATTATGAAA ATTCTACCAG TAGAACACAC CTCCTTTTG AGCTCCAGAG CACATGCTTG    120
ACATCTCATA TTAGAAAGAA TCTTGATTTC CCTCCAGTC TAGTCTTTCA TGTTTGTGTT    180
TTCTTTGTGA GAGTCTCCCT CAGCCTGCAA TGGCGTGATC TCGGCTCACT TCAACCTCCC    240
GTGCTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTTGTTT NAAAAAAAAA AAAAAAAAAA AGGGCNGGGG GGAAAAAAAA AAAAAAGAAC    60
TCCTGGAGAG GGAAATAGCA AATGTGTCTT GCCTTTTGTG GCTCTCTCTC TCTTTTTTTT    120
TCTCTCGCTC TCTTCTTTC TCTTCTCTC TCTGTTTTTA AGTCAAGCAT TGGTCTCGAG    180

```

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 742 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNANN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN    60
ANNNNNNNNN NNNNNNNNNN NNNNNNNNNN ANNNNNNNNA NNNNNNNNNN NNNNNNNNNN    120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNANN NNNNNNNNNN NNNNNNNNNN    180
NNNNNNNANN NNNNNNNNNN CNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN    240

```

```

NNNNNNNNNA NNNNNNNNAN NNNNNNNANN NNNNNNNANAN GNANNNNNNN NNNNNNNNNN 300
NNANANANNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNC CCCCTTTGTC 360
ATNGTTNTCG TTCCNTTCT TCCTTGTTTC TTTTTCGGCA CAATATTTCA AGNTATACCA 420
AGCATACAAT CAACTCCAAG NTCGGAATT TAATTACTTC ATGGCCTACT TGATGCAGGC 480
TGGAATGTTA TCCCTGGGGT GTGCTTGGAC CCCACCTGCT TTCTTTCTCT CCTGCCCTC 540
CCCTACTCTC ACTGTAATTT ATGGACCCTG CCCGCCTGCG TGTGTGTGT ATGTCCTGTG 600
CCTTTTCTCA CTATTGTTG GGTGTGGGAG GGGGTGGTTT TTTACTGAAA AGGGGGGTAC 660
ACCTATAGCT TTCTTGATGT TCAATCAATC AGTCACTGTG TCCCAGACAT ATTCAATAAA 720
CACAGATTGG TACCATCTCG AG 742

```

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

```

GCGATTGAAT TCTAGACCCG CCCAGGAGC CTCCAGCTGC CTAACCACTG CCATTCTTTC 60
ACAACACGAT TTTCTACAAA TCTACAGCAC AACCGAGTTT GTAACCCGTG GGTTAGTATG 120
AGGACCGGGT TCGTGACTC TCTGTATCTC CTCTTAAGCT TCGTCCAGGG TTCTTTATTT 180
TTGTCTGCTG CCAATGTCGT CTCGCATGCC TGCACCCTCG CATGCACGCT GCCCGCATGC 240
CACGTGCCAC GCTGTAGCCA CATCCTCGAG 270

```

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

```

GAATTCGGCC TTCATGGCCT AGTTGATGTC CTCTCATATT TTGTTGTTTA AATACGCAGT 60
GTGGTGGTTG TTATTTAGGA CTGCCTCTGC TCTGACAGAT GTGTCTACTC TACAGAGAGA 120
GAGAGAGACT GTGTCTATTG TCCCACCAGG CTGTCCAGAT CCAAACTCCA ATGACCTTTC 180
TGCACTCTGC CTGGCTATTG GTTACAGTTT ACATTCTACC TTCTCCCAAG GTATTGAGGG 240
AGGCTTGCAT GCAATTCTCG AG 262

```

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCTAGA CCTGCCTCTC CTGACACGGG CCACCAAACC CCTTACCTGG TTCCTTGCTG 60

```

TAAAACTTCA CCAAATGAAG CCAGAGTTGA TCATGACCCT CTCGTGCTCG AATCCCTTCT	120
GGGCTCCCCT CTGCCCCCTG CAAAGCCAC ATGATACCAC AGAGAAGACC TGTCCCCTGC	180
AGGCCAGCTG CTTCAGCCTC TTCCCTCACA CACATCGTCC CGCACACGGC AGCCACCATG	240
GACTCAACAT CCCCACACA CGGTGCTGCC CTCTGCATGC ACCGACCCCC TGCCCCCTCC	300
ACCAGCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

GAATTCGGCC TTCATGGCCT ACCTAGGTGC TTTTAAAAAT ATTCAGACAA ATATCTATCT	60
TACATTGATT AAACCGTGT AAATTCATT GCAGTATCTA CATCGAATGT CAAAAAAGTA	120
TACTTATTTT TGTTCCATAC TTATGTACAA TTTTTCCTT CTTCAGGCTT TTTCATTTAC	180
CTTTTGGAAA AAGCACTTAC TCTCCCTTC CCTATCACCC CATCCCCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

GAATTCGGCC TTCATGGCCT ACAGTTGTTT AACTTCCTT TACAAATATA AAGATAGCTG	60
TTTAGGATAT TTTGTTACAT TTTTGTAAT TTTTGAAATG CTAGTAATGT GTTTTCACCA	120
GCAAGTATTT GTTGCAAACT TAATGTCATT TTCCTTAAGA TGTTACAGC TATGTAACCT	180
GTATTATTCT GGACGGACAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC TTCATGGCCT AGGGCTTGTC TTTTTCATTG TTGAGTTGCA GGAGTTCTTT	60
ACATATTCTG GATACTAGAC CCTCATCAGA TATGGTTTAA AAATACTTTC TCTCATTCTT	120
TTCACTTTCA AGTATCCCTT TGATGCACAC ACCCAAAAAA GCAAATAGTG TCCAATTGCA	180
TTCTTTGATG AAGAAGAATA CAAGCAGTAA GTCAATTACA GCCTATTTT TCTTTTCTT	240
TCTTTCTCTT TCTCTCTCTC TCTTTCTTTC TTTGAGGCAG GTAGGCCATG AAGGCCGAA	299

(2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GAATTCTAGA CCTGCCTCGA GCTCCAGCTG CCAACACCCT TGGACACAAT ATTCCAGTCT	60
CCACTGCCCA TCTCATGTGG TTCAGGTTC TCGAG	95

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GATGCTTGGC TCACTCCCCG CTACTGGCCC CCAGACTTTT CCACCCCAGG AAATGTCTCC	60
CCTGCCTGCA GCTTCAGCGA AAGCCCAGGA GGCAGGCCAA TCACTTGAG	109

(2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

GAATTCGGCC TTCATGGCCT ACACATTTCT GTACCTGGAA AAAAAATGTA TCTTATTTT	60
GATAATGGCT CTAAATCTT TAAACACACA CACAAAATCG TTCTTTACTT TCATTTTGAT	120
TCTTTTAAAT CTGTCTAGTT GTAAGTCTAA TATGATGCAT TTAAAGATGG AGTCCCTCCC	180
TCCTACTTCC CTCACTCCCT TTCTCCTTTG CTTATTTTTC CTACCTTCCC TTCCTCTTGT	240
CTCCCCACTC GAG	253

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC TTCATGGCCT AGGTTGTAAG TGAATTTTATT TTTTCTTTTC TATTTTCCAG      60
TGTTTCTGTA ATGCTTTCAT ATTTCTTTTG GTAGTTAGAA AATAAAGGCT AATTTTAA      120
AAGAATATCA TAGTCTAAAA AATTAAAGGA TGCATAGAGT TCCCTCTTGA CTATGTGACA      180
TCTAAACTGA ATGAAGTGTG TCGGTGGCAC AGTGGAACAG CCGAGTCTCA GGATTCTGAC      240
AGATTTTGG ATCCCAGCTC TACCACTAAC CTTGGGCAGG ATTTTAGTCC CTCTGAGACC      300
TGCTTTCTCG ATTGAATTCT AGACCTGCCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GAATTCGGCC TTCACCTAAA TACTCCTCCT TTTGTATCAT TCAGCCTTTT GTTTTAGTTT      60
GGTAAGTTT AAGAAATTTC AGCAGCAAAG TTGTTATCA GTGGGCACGA TGGACTCCAA      120
ATGCCTCAAG TTATGTATAC CTGTGGAGGT CACGTACTTC CAAATTGTTT TCTTCCCTCAT      180
CTTCTCCCTT TACCTGCACG CCCAGGTGCG CCAGCCGGGC CTCGAG                                     226

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```

GAATTAAAT AAACAAAAGG CAGCCAAGGA TGAAAGGATT TAGTTCTAAG ATGTTTCACA      60
GTTGTGATTT GTTTATTTTA ATCCTTAGTA GTAAATTAGT ACTAGAAGGA TCAGGTATAT      120
CTTCCTTAAT TCTTCCCAGG GGAGAGAAAG TCCCATTCTT CGAG                                     164

```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GAATTCGGCC TTCATGGCCT AAGCCTATGT TGATCTTGAA CTCCTGGGCT CAANCCNTCC      60
TCCTGTCTCG GCCTCCCAA TTGCTGGAAT TATAAGCACA TTACACAGTG CCCAGTCTAC      120
CTACATTTTG ACAGACATAT AATATTCCAT GGCATGGTTA CATTATTCAG TTAAGAATGT      180
TCCCGGTTTT CTCTAAGATA ATGCTGCCCC TCTGTGTCTC ACTCTGGACA TGTAGAGTAC      240
CTGCAAAGAC TTGGACTGCT TGAGCAGAGG GCCTGCTTTT GTTTTGTGTT CTTCTGCCT      300
GTTGTAACCT GATGCTGCCA AATGATCCTC TTAAATGATT GTACCACCTT CCCTGCCACC      360
ACCAGATTTT AAGGATTCTC TGTACCTCCC AACACATGAT GACATCATAC ATGAAAAGTT      420

```


TTGCCTGCCT GATGGAATAA TTGAGTCAAG AAATAGGATG CTAATGGCAT CTCGCTTAC 480
CCGGTCTCCT CGAG 494

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTCGGCC TTCATGGCCT AGTTGGGTGT TGAGCTTGAA CGCTTTCTTA ATTGGTGGCT 60
GCTTTTAGGC CTACTATGGG TGTTAAATTT TTTACTCTCT CTACAAGGTT TTTTCCTAGT 120
GTCCAAAGAG CTGTTCTCTT TTGGACTAAC AGTTGTCTTG ATGAATAATT TCATTTTCCT 180
CAAGTTTATG ACACTCGGAA CGTCAAGAAC TGGAGGTTTG TGCAATTTGA GACCGGTCGG 240
CACTGTGCAG AGATCAGAGT ACTAAGAGAC AGAGATTAAA ATGGCTATCC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATTCC ACCTATATGT ACTTAGCAGG 60
GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA 120
CTTCATGATG AGAGGCTCTT GGGTGACAAT TGGTGTGACC TTTCAGCCCA TGGTTGGAGC 180
TGGAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG 240
GTTGTACAT TCTGGTGTGA TGGGTGCAGT GGTGGCTCCT CTGACAATAT TAGGGGGTCC 300
TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC 360
CATGTGTGCG CCCAGTGAAA AGTTTCTGAA CATGGGTGCA CCCCAGGGAG TGCTCGAG 418

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC TTCATGGCCT ACAGACATCT AATCGGAATC TTGCTCTTGT TGCCAGGCT 60
GGAGTGTAAT GGCACAATCT CGGCTTACTG CAACCTCTGC CTCCTGGATT CAAGTGATTG 120
TCCTGCCTCA GCCTCCCAAG TACTGGGAT TACAGCCCTG AAAACCACTC GCTTGCAGAG 180
CGCTGGATCA GCAATGCCTA CTAGTTCTTC ATTCAAACAC CGGATTAAAG AGCAGGAAGA 240
CTACATCCGA GATTGGACTG CTCATCGAGA AGAGATAGCC AGGATCAGCC AAGATCTTGC 300
TCTCATTGCT CGGGAGATCA ACGATGTAGC AGGAGAGATA GATTCACTGA CTTTCATCAG 360

CACTGCCCT	AGTACCACAG	TAAGCACTGC	TGCCACCACC	CCTGGCTCTG	CCATAGACAC	420
TAGAGAAGAG	TTGGTTGATC	GTGTTTTTGA	TGAAAGCTCA	ACTTCCAAAA	GATTCTCTCA	480
TTAGTTTATT	CCAAAACACC	AGAAGGAAAC	AACGGTCGAT	CTGGTGATCC	AAGACCTCAA	540
GCAGCAGAGC	CTCCCGATCA	CTTAACAATT	ACAATGCGGG	AACTCGAG		588

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	TTCATGGCCT	ACGACTGGGG	GAAATGTCTA	TTCTCCTGTG	TATCTCTGGG	60
CTTTTCTTGT	TTTTGGCTGC	CTCCTGCTCA	GTTCTCTCT	TTAGGTATTT	AGTAAAGCGT	120
TCATGTAATG	TCATTCTCTGA	GGACCCAAAG	TGATGCTCTT	TAACATGGTG	AACAATGGTC	180
ACTATATGTT	GGGCAACAG	TTCTGAGGGG	CTACGCTGAG	ACTGAGCTGA	TTGTATGTGC	240
TGGAAAATGG	AACGAAATC	CTGTTCTTT	TTGTTGCTAT	GGACTAGATC	TCGGCAAAGC	300
TTGCGTTTCT	GAGCCAATAA	GCCACTGGGT	CGTGCGAGGT	CCTCATCAAA	AGAGTCCATC	360
CGGACATTGA	CCTGTGCCTC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	TTCATGGCCT	AGCAGTTCAC	CACTGCAAAA	CCACGGGGCT	GCGTGAGGT	60
ATTCATGGGA	CACCGAGTGG	TATCACTAGC	AGCGGACTCT	GCATGCTTAC	TTAGAGCATA	120
AAAGGATAGC	ACCCTTGGCC	ATTGCCTGAC	ATGAACTCAG	TTTGAAATT	GCAGAGGTGT	180
GGAGAGCCAT	GGATGGGTTT	TATAATTTAT	TCTAATGTAA	TCTCTGTGCT	AAAGGCTGTT	240
TGAAAAAAT	AATGAAGTTG	ATGTTGCTTA	AGTTATATGC	AAATGTAAAC	TGGTCTTCCT	300
TCAAGATGTT	TGGAATGGAA	TGAATGCCCT	TCCCCTGGGT	ACCTCCCAAT	ACCTACCTCT	360
AAAAGAGCTC	CAGTAAGGCT	TCCTTATCTT	TCCTTGCCCT	GCTTCCTACA	CTGCTGCTGC	420
AGGTGTCTCT	GGGTGATTGT	GGGGAAACC	ACTGTGGTTA	AGCACCAACA	CCAAGACTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```

GAATTCGGCC TTCATGGCCT AAGGCCTTGG TGCCCTGTGG GTGGACTCTG GGGAGGCCAG      60
GGGCCCAAGG CCACCTTCTA GGGCCTGAGG AGCCCTCTGA GACCTGCACA CCCACCCCAG      120
GGAGCGCCCC TCCCTCCACC TCTGTGCCCC CCCAGTGA CTGGAACCTC TGTCTGTTTT      180
GCAGATTCAT CCGGAAGGGC CGCCAGCCAG TGGATTTCCC GGGCCCTCAG CCCTCTGGAG      240
TGTACGAGTT TTGGAGAAAC CTCTTCCTCT GTATATGCTT TTGACTTTCC TGGACTGATG      300
TAAAAAATACT CTTTCTTTG ACCTGTTTAT TTTTAAGACA CGACGTGATT GTGTCAGCTT      360
ATATTTTATT GCTGAAGTAA ATTTTCAAAT GTTTTATTAG TTTTCTTGGG TCCTTGTCTG      420
CTCATTTTGG AGTTTTTGTG ATTTTGATAG GTGTTCTTTT ATGCTTTGTA TTGTTTTCTT      480
AATGACTTTT ACCTTAGTTT TTAACAAACC CATAGTACAG TGTACCCTCG AG              532

```

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```

GAATTCGGCC TTCATGGCCT ACATTTTGGG AAAAAAAAAA ATCTACTTTG TGTATGTGTG      60
GGGTGTGGGG TGTGAGAGAT ACATTCCTTT TTNGTGTCTA AATCTCACAG TCCACATATG      120
ACTTTCCTCCA CTGAGAATT CTCTCTCATC TGTGTGGCTC CCTGCATTCT ATAAAAATAT      180
AAATAAATAA AATTTTAAAA AGTATAAAGC CGGTGCCATG AGACCCTTGG GTTGGGCAAA      240
GCGTGTGAAG TTTGAACCGG TTAACGCACG AATACAAGGG AGTGATTATT ACAAGGCCAT      300
CCCGCTTAGC ATCGGGGAAT CATTGGGGA GAGAGATTCA ATTCATAAA GATGATTTTC      360
AAGGGCTGTC TCGAG              375

```

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACACGCGGTC AACTCTGCAG GCCTGATGAT AAACATGCCT      60
CTTCTCCTAT TGTCTTCTC CTCTCTAAAG CAAGGTCAAT TCTGTGCTCG TCAGGCAGTG      120
GCAGGGGTTG GGAGGAGGAG AGAGGGAAAC ACTGTGGTCA GGCTCTGGGG AGAGTTGACT      180
ACAGTGTAGC TCTTGATTA TTTATGAATA TGGCCCTCAG ATTTATTTTC ACTCTGCTCC      240
TTCCATTCAT ATTCCAGAG ACAACCAAGA GCCGACTGTA GAAAAAGACT TCCAGACACC      300
TAGAATATAT ATCAATAGAC ACTGTTTAAA AGGGGAGACT CGAG              344

```

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

TGGCCTAAAG GGGGTGGGTA CTCCGGTGGG GTAAGGTCAG AAGGTCCCTG TGCAGGGAGG      60
GACTGGTCCC TTGAGAAGGA ACAGAGGGCA AATCCTGAAG AGTCCTGGAG GCCCAATGTA      120
GACAGCAGAA GCTGGGAGCT GACCTAGGAG TGATCGGGGG CCTGATCCAG ACAGGACAGA      180
CACAGGCTGA CACCGGAGAG TCCCAGGTGC CAACATGAAC AGTTAAGGCA GGGGCTGACC      240
CCAAAGAAAT CAGGGGCCCG CAGCTGACCC CGGAGGGTCC CAGGTGCCGA CCTAGACAGC      300
AAAGGCAGGG CTGACCCAG AGGGTCCCGA GCCGACCCAG ACGACACAGG CAGGGCTGAT      360
CCCGAGGGC CCCGCCCGA CCCGACAGG CAGTGAAGGC ACAGGCAGGG CTGACACTCG      420
AG

```

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GGGAACGAAA GATGGCGGCG GAAACGCTGC TGTCCAGTTT GTTAGGACTG CTGCTTCTGG      60
GACTCCTGTT ACCCGCAAGT CTGACCGGCG GTGTCGGGAG CCTGAACCTG GAGGAGCTGA      120
GTGAGATGCG TTATGGGATC GAGATCCTGC CGTTGCCTGT CATGGGAGGG CAGAGCCAAT      180
CTTCGGACGT GGTGATTGTC TCCTCTAAGT ACAAACAGCG CTATGAGTGT CGCCTGCCAG      240
CTGGAGCTAT TCACTTCCAG CGTGAAAGGG AGGAGGAAAC ACCTGCTTAC CAAGGGCCTG      300
GGATCCCTGA GTTGTGAGC CACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT AAAACAGATA ACGCTATAGA GAAAACACTG TTTACTGAAC      60
AGTGCTTTGA AACCACGAGG GTGATCAGAG CCCCATTTCTG CCTTCTAGAG ATAAACCTGT      120
CTCCCTTCCT GCAGAGCTAG CTCCTCCTAT TGCTTCTGGT TGTCGTTTGT CTTCACTCTG      180
CTTCCTGCCA GTGCAGCAGC TCCTGCTAGA TCTTGACATC CTAGTGGCCA GATCCCAGGG      240
GCGGTGCTGG TCCTATCCGA GCTCTCTGCC TCATCTCCCA TTCCTTTTTT CCACACTCAG      300
TGTGTATTCT CTTGGATTTC CATACCCTGT TCCTCCTACC ATCCACCTCT CTACCTCATC      360
TCCCGACCTG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC TTCATGGCCT AGCAGGTCAG GAGCCCCGGG AAGGCCGAGA GGTACTCCAA      60
AGGGGGGCCG CTGGTATCTG AAGGCCCTT GCAGTTAGTG TGTGTTGAG CTGTGGGCAT      120
GAACATGCCA CAGGCAGACA CTGTTTAGCC AGGGTTTAA GAAACACGGA GGGTCCTGTG      180
GATCTGGAGT TCATTTGTCA GGACAGGGAT GGGGACCCCT CTGAAGTAT CACTGTGGGC      240
TGAGGGGTGC TGGCCACACA ACCTCTGTGG GAGGCATCTC TTGCAGTGAA GCTGTGGTC      300
CTCAGTTCAG TGCCCACTGA GGGTAACCAG GCCCCAGCTC TGCACCCCA CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCTAGA CCTGCCGAG CACAATCCCG TGGACAGAGC TTAATCCATC TAACTCGTTT      60
TCAAGTGCAT GATTTTCACT TTCACTTTTC CTTTTCCTT ATTATGTTGC TTAAGTTGTA      120
CAGTGGCAAC TGAAATGCAT TTCAGAAATA GGAGGTTTCG TCCAGCACCC TCTGCAGCCT      180
TGGTGCCTGT AGCTCTGGAC TTCCCTGGGC CTTTCCCTGT GGGAGGGCCC TGTAGACCAC      240
ATCAGGGTGG GGTGGGGGTC ACTTGGCAA AAGGGCCGAG GTCTGGTGAT GTGGTTCCCA      300
GGATCTGGA CCTCTCCAC CCCTCTGCA GTTGGACTGA ATTCTTCCTT TTCATCCGAA      360
GAAACCCACT TGCTGTTTCC AGCCAACTCG AG      392

```

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GCAAGATGGC GACCGAGACG GTGGAGCTCC ATAAGCTAAA GCTTGCCGAA CTAAAGCAAG      60
AATGTCTTGC TCGTGGTTTG GAGACCAAGG GAATAAAGCA AGATCTTATC CACAGACTCC      120
AGGCATATCT TGAAGAACAT GCTGAAGAGG AGGCAATGA AGAAGATGTA CTGGGAGATG      180
AAACAGAGGA AGAAGAAACA AAGCCCATG AGCTCCCTGT CAAAGAGGAA GAACCCCTG      240
AAAAAAGTGT TGATGTGGCT CTCGAG      266

```

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC TTCATGGCCT AAACAATGAA TAAAGCCAAG CCAGTTCCTG CCCCCGTGGA      60

```

GCTTGTAGTC AAGACATTGA ACAAGTGATC AGAAAGATGT TGACTGCTGC AGCAGAGGGT	120
TGCAAGCTGC TCATGAGTAT ATAACAAGTA GCCCTAACCA AAGCATTCTC TCCCTTGGTT	180
TAATGTCCAC CCATTGAGGT GACTGCTAAA TACTAATCCA TGACTCTATC CCTTGGCATT	240
CAAACTCACA CATCCACCTA CCTGCCTCTC CAACCTCCCT GCCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC TTCATGGCCT AGTCTCTGCC ATGTTCTAAA CTGAAAACCT CCTAGTCAAC	60
TTCACACTTT ATTCCCTGAT CCTCAATTGG TTCCCATGTC CCGTTAGTGT TTCTTGTAAG	120
CCTCTGCCAC CACCGCAGAT CGAACTCTAA TCACATCTCA CCTGAATTAT GGAAAAGTCA	180
CCTCAATTCT CTCACCCATC CCAGCCTCCA CTATGGATTA ATATGCCTAA AGCAGAGCTG	240
ACCACAACGG TGAGAAGAAT CTGAGAGGGA AGCAGCAGCA AACACAAGAG TCACTGGACA	300
TGCATGCCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

GAATTCGGCC TTCATGGCCT AAGAAAAAAG GATAGACAAA TAGTATTTT GTGATTTTAC	60
AGTAGCTTAA AACTATAGGA TTTTCTTCC CCATTACTTT GCAACAACCTG ATACTTTTGA	120
CCAGTTCTCT TTCCTAAGCA TTTCTCTCCT TGAGCTATTA CCCAAATTGT CCTAGTTCTT	180
CTCTGCTTGT CCCTCAGCTA TACACAGTCA CTGAGGCTCT GTGCTTGCT TCTGTTCTC	240
TCTCCTCATA GGGATTCCTC ATGTTGGAGT TCATCAAGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

GAATTCGGCC TTCATGGCCT ACCACGATAG ACCAGCTGTA GCTCATTCCA GCCTGTACCT	60
TGGATGAGGG GTAGCCTCCC ACTGCATCCC ATCCTGAATA TCCTTGCAA CTCCTCAAGA	120
GTGCTTATTT AAGTGTTAAT ACTTTTAAGA GAACTGCGAC GATTAATTGT GGATCTCCCC	180
CTGCCCATTT CCTGCTTGAG GGGCACCCT ACTCCAGCCC AGAAGGAAAG GGGGGCAGCT	240
CAGTGGCCCC AAGAGGGAGC TGATATCATG AGGATAACAT TGGCGGGAGG GGAGTTAACT	300

GGCAGGGCAC TCGAG

315

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GAATTCGGCC TTCATGGCCT AAAGATGTTA GATATTACAA TTGACTGAA GAACAGAAGG	60
CGATCAAGGC CAAGTATCCG CCAGTCAATA GGAAGTACGA GTGTGAGAGA TGACTTACAG	120
TCTCTTCTGT TTCACCTTTT GGATGAATGG CTTTATAAGT TCAGTGCTGA TGAATTCTTC	180
ATACCCCGGG TGGGGAGAAG AATTTTCATT GTCCAAGCAC CCTCAGGGAA CAGAAGTCAA	240
AGCAATAACA TATTCAGCAA TGCAGGTCTA TAATGAAGAG AACCCG	286

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC TTCATGGCCT ACCTCTGTGA AAATTTAATT TTTTATATCC TGATTAATAT	60
ATTGTGACTT TAGGCCCAT TTTTCATGTG TTCACCTTGA TAGAGTTAAT CCATAAAATT	120
GCTCTTTACT TTAGCTTATC AAATGAAGTA TTATTTTGTG GACTGGAGGC CAAAAAGTCA	180
ATGTGAGCTT CTCACAGGTT TTTAAAGCTC CACTAAAAAT AATTATCCAC TTGTCTTTAC	240
TTTTGTTGAC CAGAAATAGT GGTAACTCTG CCAGAGCCTG TACTTACCTG CCAAAAACAA	300
TTAAATCTGG TTAATGCCTG AAACCAAATC TCTCAGTCTC AAGTGTTATA CTATCCAAGT	360
TTTAAATGGA AAGGTAACT GTGGAGTAAT GAAATTTTGG TTTTACTGTA CCTTTTGCTA	420
TCAAGATAAT ATTCATGTTT GAAATCTTGT CTTTATTTGG AATTAGTTA CTGTCTGCTT	480
TTAACCTTTG CTTTCCTAAA GAAAGTTTGA GATCCAGAGA GTTCAAGGGA TCGGGGAGTC	540
TCGAG	545

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC TTCATGGCCT ACAATAAGTG TGTTATACTT GCTTTGGTGA TTGCAATCAG	60
CATGGGATTT GGCCATTCT ATGGCACAAT TCAGATTCAG AAGCGTCAAC AGTTAGTCAG	120
AAAGATACAT GAAGATGAAT TGAATGATAT GAAGGATTAT CTTTCCAGT GTCAACAGGA	180
ACAAGAATCT TTTATAGATT ATAAGTCATT GAAAGAAAAT CTTGCAAGGT GTTGGACACT	240

TACTGAAGCA GAGAAGATGT CCTTTGAAAC TCAGAAAACG AACCTTGCTA CAGAACTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC TTCATGGCCT ACACATTTTG ACAGCTTCCT TTCAGGTTTC TTGAGCTCTC 60
AGAAAAATTA GAAGGAAGTG GGCTGGGGAT ATAGAGAGAG TCCAAACTAC CAACTAATGA 120
ATGAATCTGA AGGAGACACA GAAGGGCAAG TAGAGTTTAG AGTTTGAGAG TGCAGGAAAG 180
TTTTGAAATG GTCAGAACTG CCAGAGTAAT TTCTGAGATC TTACTAAGCA CTCTCCCACC 240
GTTTGCCTTA AAGATACCCC TTCCCCCAA TTGAAACATC ACAAATCTGC AGAGCTCTTT 300
AATCAGGTGT GTTATACACA ATGAATTTAA TTCTCTTATT GCCCTGGAAG AAAGATAAAC 360
CAGATGTGGC CCTTGCCCCC TTTCAGTAAG TATTTGTTAG ATCTTCATTA CATTTTAGGC 420
CTCCTAGGCC ATGAAGGCCG GCCTTCA 447

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GAATTCGGCC TTCATGGCCT AAAATTCGGC TGATTTCCCC CTTGGCTAGC CCAGCTGAGC 60
GAGTCAAGAG CAAACCAAGA AAAACTACAG AAGTGACAGG AACAGGTCTT GGAAGGAACA 120
GAAAGAACT GTCTTCCTAT CCAGAGCAAA TTTTACGCAG AAAAATGCTG TAATTTCTTG 180
GGAAGATTTT AATGTACACC TATTTGTAAA GTCATCAGAA TAGTGTGGAT TATTAATAT 240
CTAGTTTGA AGAAAATAAT TTATATAAAT TATTGTAAAT TTTTATGTAA ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAATAAAAC AAAGCCTTTT CTGCCTTTTA CATTCAATTG 60
AGTAACCGTC AACACCCAC CCATATACTC CCATACCATG AGGTGTAATT TTCAAACCTC 120
TCGCATACTT TTAATTACTA GTTTAATTAT TTGCCTTCTC ACTGAGTCTA TAATCTCACT 180
TAGGGTAAGA ACAGAACTCA ATTACAGATG CTCAGTAAAC ACTGGAAGGC CGCGGCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

```
GAATTCGGCC TTCATGGCCT AGGGCTGCCC AAGATTGTGA AAGGTAAGTA GTATCTTTAT    60
TTGGGGGTAA CTTAATTATA GATAAAAGAT GGTCCAATAC TGGAAACTGT TCGTTTCTTC    120
CCTTGATCT AGTCTTCTTC TGCTTTATAT AGAATCCCAC CATCATCTCG AG              172
```

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

```
GAATTCGGCC TTCATGGCCT ACACGTGACA GCCTTTCCT TTTGAGATCA CCTTCCTCAC    60
ACTGATGGTC TCATACAACA TCATTTTGAA TGTCCTCAGC TCTCTGCACC ACCCACCCAA    120
CTCCACTCTG GGCCACCGCT GGTGTATCCA AGATCAGGAC ACCAGTCCCT GGGCACCAGG    180
GAGTATGCTG GCCACTGAAG CAGCTTCGTT TTTCCGGCAC CCATGTTGTA AAATCGACTC    240
CCCCAACTC GAG              253
```

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

```
GAATTCGGCC TTCATGGCCT AGAAAGTTTA AAGATTAGCG TACTGATTAT GATGGGATTT    60
TTACTGAAAA TTAGTTTTGT CAGGCTGCTT GCTTGCTCTGT GTATTTTCTA TTCTAATTTA    120
GTTTTTATTT TTATCAAAGC TGTATTTACT TATAATGTAA AAAGTCAATT AGTTTTCCTA    180
GGCTTATTAT GGAAAACAGT AGTCCCCCAG GCTCCCATCC CTATGTCCAA CAAACTCGAG    240
```

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAAGCCTTT GATTATTCAG CTGCCACTGC	60
CTACAGGCCT TCTCCCATAT TCCTTCCTTC TTGCTAAGTC TGACTTAAAC TAGGCTTAGG	120
CACCAACTCC TATAGGAAGC CTTCCTTGAA CCTGGCCCTC TACTTTTCAC TCACTGACTA	180
CCACTCAATT AACTGAACGG TGAAGAGTAA CCCACAGCTA CGCATTCTGC CAGACAACAG	240
AATTTTACTA CTTCTTCTCA CTACTGGTTC ATATTCTGC AACCAGAAAA TATCATTTC	300
TCCCTAGTAA CTATGGCTTC CATCTGTTAC TTCC	334

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC TTCATGGCCT AATAATGACT TGTTGGTTGA TTGTAGATAT TGGGCTGTTA	60
ATTGTCACTT CAGTAGGCCA TGAAGGCCGA AG	92

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GAATTCAGTT CTTATATAT TCTAGTTATT AATCCCTTAT CAGGTGGATA GTTTGCAGAT	60
ATCTTCTCCC ATTCTTTAGG TTGTCTCTTC ACTCTGTTGA TCGTTTCCTT TGCTCTGCAA	120
AAGCTTTGTA GCTTGAGATA ATCCCATTTG TCTGTTTTTG CTTTGTGTC CTATGCTTTT	180
GAGGTCTTAC TCAAAAATT TTGCCCAGA CCAGTACCCT TGAAGCATTG CCCCAATGGT	240
TTTTTTTTTT AGTCATTTC TAGTTCAGGT CTACTCGAG	280

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC TCCATGGCCT ACATAGATGG GCACACTCAC ACACAGAAGT GTGCTTGTAC	60
AATCACCACA CACGCACAAA CACACACACA CACTAAAAAT ATAAAAACACA TCGTTCACAT	120

```

GGGCATTTC AATGATCAGC TCTGTATCTG GTTAAGTCGG TTGCTGGGAT GCACCCTGCA      180
CTAGAGCTGA AAGGAAATTG GACCTCCATG CAGCCCTGAC AGGTTGTGGG CCCGGGCCCT      240
CCCTTTGTGC TTTGTATCTG CAGCTCTTGC GCCTTTTATA AGTCCATCCT AGTCCCTGCT      300
GGATGGCAGG GGGCTGGATG GGGGGCAGGA CTAATACTGA GTGATTGCAG AGTGCTTTAT      360
GAATTCACCT TATTTTATCG AAACCCATTG GACTCGAG                                398

```

(2) INFORMATION FOR SEQ ID NO:356:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GTGTCAGAGC AGGCATTTC CAACCTAAGG AAATCTTTGT TTTCAAATAT TAGGGTTTTT      60
TTTTAATTGT GGTAAAGGA TTTTGGACAT GCTTTGTAAA TTGTTAGTAA AAGGACCTAT      120
TTTCCACCTG TATTCTAAGT TATTTTTCCT CCTCTTTTG AATTTTTCAG GTCAGCCCTT      180
CATAAACCCA GATGGGAGTC CAGTTGTGTA TAATCCTCCT ATGACTCAAC AACCACTTAG      240
ATCCCAAGTG CCTGGACCTC CACAGCCACC TGTGCCAGCC CCACCTCAAC AACCAAGCAGC      300
TAATCACATT TTCTCACAGG CGCATCTCGA G                                331

```

(2) INFORMATION FOR SEQ ID NO:357:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GCTGCCTCGA GGTCTCCAAG ACTTTTTCAT CTCGTATCGT TTCGGGATCC GTATCCATAC      60
TTTTATTTTC ACTTCTTCC TCTTCCTCCT CGAACTCCTC GTCGCCATCC TGTCTGCCCC      120
GCTTCCCGTA GCCATCCTCG CCTTCTTCTC CGTGCTCCTT CTCGCTCTCG CCATCCCTCG      180
GCATACTCTC CCTCTTCTC TCGAG                                205

```

(2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 584 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

CAAAAGAGAT GGTACCAGCA AGAGATTAAT ACTAAAGAAA TGCAGTCAGA TTTTAAAGAA      60
ACTGGAAGAA GAGCCATTTC TCCCAGGGAG AAGATTCTAG ATGTGATTGA TGACACCATA      120
GAAATGGAGA CAGGTCTGAA AGCAATGGGA AGAGAGATTG GTCTAAGGGA GAAGACGCCA      180
GAGGTGATTG ATGCCACTGA GGAAATAGAC AAAGATTGCG AAGAAGCTGG AAGAAGAGAA      240
ATATCCCCAC AGAAAAATGG CCCAGAGGAG GTTAAGCCTC TAGGTGAAGT GGAGACAGAT      300

```

TTGAAAGCAA CTGGATATGA GAGTTCCCCA AGGGAGAAGA CACCAGAGGT GACTGATGCC	360
ACTGAGGAAA TAGACAAAAA TTTGGAAGAA ACTGGAAGAA GAAAAATATC CCCAAGGGAA	420
AATGGCCCCAG AGGAGGTCAA GCCTGTAGAT GAAATGGAGA CAGATTTGAA CGCAACTGGA	480
AGAGAGAGTT CTCCAAGGGA GAAGACACCA GAGGTGATTG ATGCTACTGA GGAAATAGAT	540
TTGGAAGAAA CTGAAAGAGA AGTATCCCCA CAGGAAAACT CGAG	584

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC TTCATGGCCT ATGCTTTCTG AATTGGCAAG ATATTCCAGG CTTATTGGC	60
ATTCATCTTA CTCTAGACCT ATTATCAACC ATGTCTCCAA GGATAAGTAG ATCCTTTTAA	120
GGGAAAATGG TATTTTGAAA GCATAGTGTG GGATCTGAGG ATACCTATTC CTGTCAGGTT	180
GTTATTGTT TGTTTTCAGT GAGTAGATCT TGGACTTTAT TAATTTTATT TATTTATTTT	240
AAGAAAAGTA CATCATGAGT TATAAGTAAT AATTCCAAC TCAAATTTAA TATTGCTTAA	300
CTTCTTTGAT TTTATATTTA TCTTTTACAC TGAAAAGTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GCGGTGGAC AAAAATGAAG CCAATGAAGA AGGCATGCAC TGGCCTTTCA GTCCTGGCA	60
GTGGCAGCAA GTCCCCCACA GCCACCAGGG CCAAGGCTCT GAGGCGGCGA GGGCTGGGG	120
AGGGTGACAA GCCAGAGGAG GAGGATGACG AGGCACAGCA GCCGCAACCA CAGTCCGGGC	180
CCGAAGAGGC TGAGGAAGGG GAGGAGGAGG AGGCTGAGCG GGGCCCTGGG GCTGAAGGTC	240
CTCCACTGGA GCTGCACCCT GGCACCCCG CTCCAGGCC AGCAGAGGAC CCCAAAGGGG	300
ATGGGGAGGC AGGCCGCTGG GAGCCCTCAC TCAGCCGCAA GACAGCCCCG TTCAGTCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GCACCACCTC TTGCACTGTG AGGAGTTTAT TGATGAATTC AATGGGCTGC ACATGTCCAA	60
GGACAAGAGG ATCAAGTCAG GGAAGCAGTC CAGTACCTCC AAGCTGCTGC GTGACAGTCG	120

```

AGGCCCGTCG GTTGAGAAAC TGTCCACAG ACCTTCAGAT CCTGGAAAGA GCAAGGGGAC 180
CTCCCATAAA CGGAAGCGAA TTAACCC'CC C'GGGCAAG CCAAAAAAAG GGTATTCAGG 240
CAAGCCCTCT TCAGGAGGTG ACAGGGCCAC CAAGACGGTG TCTTACAGGA CTACCCCCAG 300
TGGTTTGCAA ATAATGCCCC TGAAAAAGTC TCAGAACGGG ATGGAAAATG GGGACGCCGG 360
CTCTGTAAGG ACCTCGAG 378

```

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GATTGTATTG AAAGTCAGAC ATAGGTGTGG AACCAGTTAT GGGAGTGAGG ATAAGTCTAG 60
ATTTGGGAAT CAGTSCAGA GAGGTGGACG ATGAAAGTCT GAGAAGAAAG GATCTTGCTA 120
ATGGAGTGAA CTCAGAGCTT GATAAAGGGA GGATGAGTGG AAATGGAGCT CAACGCTGTG 180
CCTTGGGAAA TACCTCTGTG GATTGGTGGG AGCACAGTGA GAAATTCAG AAAGACACAG 240
ACAATGGAAT AACCAGAGAA CTCGAG 266

```

(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

GAATTCTAGA CCTGCCTCGA GCATTGCCCC CGGCCTAAGA AGCTCTCTTA TCTTGCATCT 60
TGGGCTGGAC TCCTACAACA GCCACAACCT CCGTGCTGGT CTCCAGCTT CTAGCCTTCC 120
CCCATCTCCT GTCGTTTTCG ACACAGCAGC CAGAAGGATC CTTTAAAAAC AGAGGTTGAT 180
CCTGTCGTTT CTCAAAATCC TCCAATGCTT TTCCTACTGC ACTCAGAGTA AAAGCCAGTC 240
TCTGCCTTAG ATGCTCTGGG ATCCTGTACC CTCTTGGTC TCATGTCCTA CAATCTGCAT 300
TCTGGCCATA ATGGTCTTCT CTGCTGTTCC TTGAACATT CAGGAACATT CCCCCCATA 360
CCTCGAG 367

```

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTCT GAGAAGCAGT GGCCCGAGCT GAAGCATCCA 60
GACAATGAGT GTTCAGAAGC TGCCAGATTG TCACCTAGCC TTAGAAGTAA CACAGCCACA 120
TTCTGTCGGT TACAAACACA TTTCTAAGGC CAGTCCAGAT TCAAACGGAG GGCAATTAGA 180

```

```

TTTGACCCCT TGATGAAGGA GGGCAAGGTT AACTGAAAA ACAGCATAGG GACTGGGAGA      240
TATTATGATG TCCATTTTGG GAAAATCTGC CACAGACACA GTGAAGACAG AGAGCCCTTC      300
TCTCTGATCG AGGACCTCCA GAATGATCTG CTGAGTCACT CAGGTATGCT GGACCATTC      360
CACTCACCCC GGAAAAGCTC GAG                                         383

```

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

```

GAGGTTTACA GGTTTAAGCA TTTGTTTTTA CAAAAAGGAA TGGGATATGG GGGTGGTCAA      60
GTTTTACGGG TAATAACAAC ATTCTCTCTA GATGGCAGGG GGTAAAGTCTG CCTGTCTCTC      120
ATTGCTGGTA CCACATAAGG GATACATTAG TAAAGTAGGG AAAGGGTCAT ATGTGTGGTT      180
GACCTGTTCT TCAGAGAGGA ACGTGGGATG GTATCTGCTG TGTACCTGTC TCAGACCAAA      240
CCTGGGGGTG GACCAAGTCC CCTTCTTCT CAGCCTTCTT CCACAGCCTG ACTGTACTGC      300
CACCCGCACC CATGAGAAGG AGGTNNTGAA GGAAGCTTGA GGACATCCAC CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

```

GAATTCGGCC TTCATGGCCT ACAACCATTTG AAAAAATATA GACTTAGAAA ACGAAAGTTC      60
CCCTTAATCA CAAAGAACCA CAGTTGACAG GGTGATAGA TGTTTTTTTCA GATTTTTTTT      120
TTCATATGTC TGCTATCTTT CCCCACAGGA ACTGGGTTTT ATTTTAGGTG TTGTTTTGCA      180
ACCTCTGTTT TTCAGTTGCC AGTTTATCTC AGACATTGTC CTATGTCAGT ACAGGCCCAT      240
CTCGAG                                         246

```

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

```

GAATTCGGCC TTCATGGCCT ACAAAAAAAC AACTTTCCAG TGGCTTCTCA CTGCTCTGAG      60
AATAAACTCC AGGCTCTTCC ATTGCAACCA ACAGGATCTG GTGATTCGAC CCCAGCCCTT      120
CTTTCCAGGC CCTCATCACC TTGATCCTCC CTTAACCTAT CCTGCTCCAG CTGCACTGGC      180
TGCCTTCCTA TTCCTCCAGC ATACCAAGAT TGTTTCTGCC ACAGGGCCGC CACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```

GAATTCGGCC TTCATGGCCT AGTTTTTCT ACTCCTACAA GTGTAAATTG AAAAATCTTT      60
ATATTAAAAA AGTAAACTGT TATGAAGCTG CTATGTACTA ATAATACTTT GCTTGCCAAA      120
GTGTTTGGGT TTTGTTGTTG TTTGTTGTTT TGTGTTGTTT TGGTTCATGA ACAACAGTGT      180
CTAGAAACCC ATTTTGAAAG TGGAAAATTA TTAAGTCACC TATCACTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```

GAATTCGGCC TTCATGGCCT ACTTGGTCTT CTGCACTTTT GTCTCTGACG TACTTCCTTT      60
CTTCACAAGT GCCATTTACA GAAAGCTGGG CTAAACCAT TCCCAGCTAT TCCTCCTACA      120
GCTTTCCTGA ATTATTTTCT AATACAAAAT TCTGTATCTC CAAGAACTA TTACAGATTT      180
AGATTTAAAA ATATGCACTA TTTTCTACCT TGTATGTTT GCTTACTATT TTTTCTTTC      240
AGAGGATATG TCTTAAAAAT TGAAATGCAT CAAAAAT                277

```

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```

GAATTCGGCC TTCATGGCCT ACCAAGTCAA AAAATAGAAC AGTTCGGCA CCCCAGAAGC      60
CCTTGCCAC GTGGTCACAA CCTCCCTGT TTCCACCAAC AGTAACATTC TAGTTTTTAC      120
AGTAATTTCT TCCTTGCTTT TCTTTGTAAT TTTACTGCCC TGTGTTTCTT AATATGATTT      180
AGTTTTCCTT GGTTTGCCT TCATATAAAT GAAATCATAC TGAATATATT ATTTTCATATT      240
TTGCCAATA TTTTGTGTTT AAGATTATC CATCTGTAG CTCCAATGTA TTTATTTTCA      300
TTTTGTATA ATTATATGAT TATGCCACAG TTTGTCAGTT CACTCGAG                348

```

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

GAATTCGGCC	TTCATGGCCT	AGAATTATTA	GGAAACAAAT	GGTTTTGCTG	TCTTTTGGTC	60
ATTAGCTTGG	CCCCATGTTT	AAGCATTTCG	TAACAACCTGT	GAAGAGCCTG	CTACAAATAA	120
AGTGGTAGGT	GCTCTGAAGA	AAAATAAAGC	TGTTAAAGGG	AATAGAAAGT	GATGAAGGCA	180
GGGGCTGTTA	GACAGGCTGG	TCAGTGTCTG	AGGAAGTAGC	CCTGCACTGA	GACCTGAAAA	240
GTAAGAAGC	AAGCCATGGG	GAGTTGGGGA	GGAGCATTCC	AGACAGAGGC	TTGATGTGTT	300
GAACCATCTT	TTCCAAGCTC	TTCCTCTGTT	ACCTTCTCTT	TAGTCACTAT	GTCCCCTTTC	360
TATCCCAGAC	CATAATTCCA	CCATTATCT	TAAGGCTGAG			400

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

GAACGATTGA	ATTCTAGACC	TGCCTCGAGA	TCAGCACTAA	CCCCCCAAC	TCCCAGCCTT	60
TAGTTTGCTG	TAGGCTGTCA	AACCAGATAA	CCAAACTTGT	TAAATTGAGA	ATCAATAGGC	120
TGTACATAGG	GACTACAACA	GAATGACGCT	CATTATTGAC	AGAATCAAGT	TCAAACCTCT	180
TGTCCTGGCG	TCTGTTGGCC	TCTGGCAGCT	GGCTCATCTG	GCATTAGCTG	GTTGCACGAG	240
TTGCTGCAAC	CCTCCACCC	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 463 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GTGAGGTTTT	AACTGAGCTC	GAAGAATTGG	AATCAAAAGA	GATAGGTTTG	TCTCAGTCCA	60
GACAGTGGAT	AGCATAAGGA	AAGTACAAC	GCAGAAAAGA	GGGGGACAGC	GAAGAGACTG	120
GATTGATGCG	TTATCTAGGC	GGTACCTGTC	TCCATTCTTT	TCTAGCCAGC	CTTTGAGCAT	180
TTCATCAAGA	ATAGAGGAAT	TCAAAGTACT	GCAGTCTGCT	TGAACCAAGT	CTTGTGAGTG	240
GCTCTAAAAA	AAATACTTGA	ATTTGAACTT	GAAAGAACAC	TCAAATAAGG	TTTGGGGCTT	300
CTCTTTGTTT	AATACTTTAA	GCGTCTTATT	TCTAACATAA	ATATACTGAT	TGCACAGAAT	360
TTGATTGTTC	ATAGCAGCAG	TTGCCTGTAC	TTTAGAATTC	TCAGATATTA	GAGCTGAAAG	420
ATCATCTGAG	TTACTTTATA	AATGGGGAAA	TCTCGATCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 451 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAACGGCAGC	CATTGAAGCA	TATTGGAAAA	GGAAGTGGGG	AATTTATTAA	AGCACTCATG	60
AAGGAAATTC	CAGCGCTGCT	TCATCTTCCA	GTGCTGATAA	TTATGGCATT	AGCCATCCTG	120
AGTTTCTGCT	ATGGTGCTGG	AAAATCAGTT	CATGTGCTGA	GACATATAGG	CGGTCCTTGA	180
GAGAGAACCT	CCCCAGGCAC	TTCGGCCACG	GGATAGAAGA	CGGCAGGAGG	AAATTGATTA	240
TAGACCTGAT	GGTGGAGCAG	GTGATGCCGA	TTCCATTAT	AGGGGCCAAA	TGGGCCCCAC	300
TGAGCAAGGC	CCTTATGCCA	AAACGTATGA	GGGTAGAAGA	GAGATTTTGA	GAGAGAGAGA	360
TGTTGACTTG	AGATTTCAGA	CTGGCAACAA	GAGCCCTGAA	GTGCTCCGGG	CATTTGATGT	420
ACCAGACGCA	GAGGCACGAG	AGCCCTCGA	G			451

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 513 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCGGCT	TCATGGCCTA	CTCAGATCTT	AAAATTCAGG	CTGTCAAAGA	GATTTGCTAT	60
GAGGTGCTC	TCAATGACTT	CAGGCACAGT	CGGCAGGAGA	TTGAAGCCCT	GGCCATTGTC	120
AANATGAAGG	AGCTTTGTGC	CATGTNTGGC	AAGAAAGACC	CCAATGAGCG	GGACTCCTGG	180
AGGGCAGTGG	CCAGGGACGT	CTGGGATACC	GTGCGTGTG	GGGATGAGAA	GATCGAAGAC	240
GTCAATGGCA	CTGGGAAAGG	CAGCACTGAT	GTAGATGACC	TCAAGGTTCA	TATAGACAAG	300
CTGGAAGATA	TTTTGCAAGA	AGTCAAAAAG	CAAAATAACA	TGAAAGACGA	GGAGATAAAA	360
GTCTTAAGAA	ATAAAATGCT	CAAAATGGAA	AAAGTCTTGC	CACTGATCGG	ATCTCAGGAA	420
CAGAAAAGCC	CAGGAAGCCA	CAAAGCAAAG	GAGCCTGTTG	GTGCTGGTGT	TAGTAGCACC	480
TCTGAGAATA	ATGTAAGTAA	AGGAGACCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

CAGAATGGGA	TCGAAGCCTG	CCTCCTTAGG	NTCTTTGCCN	TCATCCTCTC	TGGCAAATGC	60
AGTTACAGCC	CGGAGCCCGA	CCAGCGGAGG	ACGCTGCCCC	CAGGCTGGGT	GTCCCTGGGC	120
CGTGCGGACC	CTGAGGAAGA	GCTGAGTCTC	ACCTTTGCCC	TGAGACAGCA	GAATGTGGAA	180
AGACTCTCGG	AGCTGTGTGA	GGCTGTGTG	GATCCAGCT	CTCCTCAATA	CGGAAAATAC	240
CTGACCCTAG	AGAATGTGGC	TGATCTGGTG	AGGCCATCCC	CACTGACCCT	CCACACGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```

GAATTCGGCC TTCATGGCCT ACTTCATTGT AAGGTACTTC TTGCGGCGC TGACAGTGCT      60
CACGCTCCTG GGCCTCCTCC ATGGACTCGT GCTGCTGCCT GTGCTGCTGT CCATCCTGGG      120
CCCGCCGCCA GAGGTGATAC AGATGTACAA GGAAAGCCCA GAGATCCTGA GTCCACCAGC      180
TCCACAGGGA GGCGGGCTTA GGTGGGGGGC ATCCTCCTCC CTGCCCCAGA GCTTTGCCAG      240
AGTGACTACC TCCATGACCG TGGCCATCCA CCCACCCCCC CTGCCTGGTG CCTACATCCA      300
TCCAGCCCCT GATGAGCCCC CCAGGTCCCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```

GGATTTTAAG GATCACATTC CAAGGGAAC TGATATGAAG GTTGCAATGA ATGTGTATGA      60
GTTATCATCA GCTGCCGGAT TACCTTGTGA GATTGATCCT GCATTGGTGC TAGCTCTTTC      120
TTCACAAAAA TCGGAAAACA TTAGTCCAGA AGAAGAGTAT AAAATTGCCT GCCTTCTCAT      180
GGTGTTTGTG GCAGTTTCTT TGCCAACACT GGCCAGTAAT GTGATGTCTC AGTACAGCCC      240
TGCTATAGAA GGGCATTGCA ACAACATACA TTGCTTGGCC AAAGCCATCA ACCAGATTGC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAT TATCCCTCTA CACTGTCCCC ACTATGCTAT      60
ACCCCTGCAC TATACCCCTA TGCTGTCTCC CTTACGCTAT CCCCCTATGC TAGTCCCCCT      120
ACACTATCCC CCTTTGTTGT CCCTCCATGC TACTCCCTAC GCTATCCCAC TACTCTATCC      180
CCCTGACGCT GTCCCCCTAC GCTATCCCGC TACTCTGTTC CCCCTACACT ATCTCCATAC      240
ACTGTCCCCC TACTCTCTCC CCCTACTCAA TTCCCCCTAC ACTCTCCGCG TACTATATCC      300
CCGTACACT ATCCCCGAC GCTCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

GTTTGAATGC	TCTTTACTTC	CTTTGTGGAG	CCTCCCTGCA	CAAGCAGCAC	TTTCTTTTGC	60
CATAGCAACA	TGTGCATCAA	TAATTCTTTA	GTCTGTAATG	GTGTCCAAAA	TTGTGCATAC	120
CCTTGGGATG	AAAATCATTG	TAAAGAAAAG	AAAAAAGCAG	GAGTATTTGA	ACAAATCACT	180
AAGACTCATG	GAACAATTAT	TGGCATTACT	TCAGGGATTG	TCTTGGTCCT	TCTCATTATT	240
TCTATTTTAG	TACAAGTGAA	ACAGCATCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

GAATTCGGCC	TTCATGGCCT	ACATAACTCT	CCACAGGCTC	CCCTGGGAGG	GGTGCCCCCA	60
CCTCACCCGC	CACCTCACTT	CTCAGCCCCCT	CTTCCCATCC	AAGGGCTCCC	TGGGCTGCCC	120
CCACCCTAGT	CATGATCTCG	CTCCTCTACT	CTCTCGTAGT	ACTTTATTTT	TACCTTGCTC	180
CTGGCTCACA	TTACATGCTT	ATCTTGTTAT	TATAGATGGT	TCTACATATG	TCTCCTTTTG	240
CATCCTTTTC	TCAAAGCTCC	TGTGAGGCCA	GGGATGGTTT	TATGCCTTTT	CTCATCCCCCT	300
TATGTTCTAG	TATAATGCTT	TACACATGTT	TACTCGAG			338

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

GAATTCGGCC	TTCATGGCCT	ACTTTCTCTC	CTTTTTCCT	GTAAGTGTGC	TGTTTTGTGTT	60
TTGGTCTTCC	TCTCATACCC	GTTTCTGCAT	TTTCTTTT	CTTTCTATTG	GGACTTCATT	120
TCAATTTTTT	TTAACCTTAT	CTTTTGTTC	TCTTGTTTAT	CCCATCCTTT	TTGATAAAAT	180
CCATCGCATG	TGTCTTCTTT	TTTTCTTTAT	TTTCTTTCCT	TTCTTTTTC	CTTTTCTTT	240
CTCCCAAAC	TTTTCTTTT	CACAGCATTG	GAACACGGGA	GGTAGTCACC	CAGAAGAACT	300
TGAGCGGCCT	GGTGCCCATC	CGAGACCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```
GCAGAAAATA TGGTATCGGT TTCATTTAAT AAAAATGAAA AAATAATTTT CAGTTATCAG      60
TAATTTCTCA GTTACACAAC CTCTGCCTTC ATTTCCGCTT AGCCATGAAC TTTTACTGCT      120
ACAAAGGAAT TTAAAATAGC CAAATTCTAC AATTCTGGCT GGGTGTGGGG GCTCATGCCT      180
GGGATCTCAG TAGTATGGGA CCCCAGGGCA GGTCTAGAAT TCAATCCTCG AG              232
```

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

```
GCCTCTGCTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCG ACCTTGGTTC      60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCCAGAG GCCTTGCCTT TGGCTATGGG      120
CTGCTTTGTC TAGGAATGGC CTATATTTC TCCAGATGG GACCTGTGCT GCAGGCAGCA      180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGGAAATGTT      240
TTTCCATGTG CTAACCTCC TGGTGTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC      300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC      360
TCTAATGGGT CCAGCTTCTC CCTGCCACC AATCTAACC GTGCCACTGT GACCACACTT      420
CTCGAG                                         426
```

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

```
GAATTCGGCC TTCATGGCCT AGGCCCTTAA ACTGGATTCA AAAAATGCTC TAAACATAGG      60
AATGGTTGAA GAGGTCTTGC AGTCTTCAGA TGAACTAAA TCTCTAGAAG AGGCACAAGA      120
ATGGCTAAAG CAATTCATCC AAGGCCACC GGAAGTAATT AGAGCTTTGA AAAAATCTGT      180
TTGTTAGGC AGAGAGCTAT ATTTGGAGGA AGCATTACAG AACGAAAGAG ATCTTTTAGG      240
AACAGTTTGG GGTGGGCCTG CAAATTTAGA GGCTACCTCG AG              282
```

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GATTGAATTC TAGACCTGCC TCGAAGGCCG AGAGGGAAAG TTGAAAGGTC CCAAATTCAA	60
GATGCCTGAG ATGAACATCA AAGCCCCCAA GATCTCCATG CCTGACATTG ATCTTAACCT	120
GAAAGGACCC AAAGTGAAGG GTGATATGGA TGTGTCTCTG CCAAAAGTGG AAGGTGACAT	180
GCAAGTTCCT GACTTGGATA TTAAAGGCC CAAAGTGGAT ATTAATGCCC CAGATGTGGA	240
TGGACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCTAGA CCCACCTCCA CCTTTAACTC GAAGTAACAC TGCAAATCGT TTAATGAAAA	60
CACCTCTCAA ACTGAATTGA TGTGTTGATA AAACAGAGAA AGGAGAAAGT AGTAGTCCTT	120
CTCCATCAGC TGAAAAAGGA AAGATTCTAA ATGTTTCAGT GATTGAAGAA AGTGGCAATA	180
AAAACGATCA AAAGTCTCAA AAAATTATGA AGAAGAAAGA GTCATCTTCT ATGTTGGCTA	240
CAGTTAAAGA AGAAGTCTCT GGTAGTTCAG CAGCTGTTAC GGAGAATGCT GATAGTGATA	300
GAATTTCTGA TGAAGCAAAT AGTAATTTTA ACCAAGGGCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GGAGTAATCA GAGGTGTTCT TGTGTTGTA TAAGGGTGGC AGGAGTGGAC ATTCTTCACA	60
TACACCCATT ATTGTTTTGA AGTGTTTAAT TACCTTTTGA GCTACATTTT TGCAGCTGAG	120
TTTAGAATGA AAACCACAAG AGTTTTATTG TTGGCTGTAC TCGAG	165

(2) INFORMATION FOR SEQ ID NO:389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AGAACAGAGC TTAATTATTC TTTCTGAAAC CAAGGCTTCT	60
CTAGTGAGCA CCATGAGCCT TTGGAAACAA CAGATGTATA CAATAGCAAA GTTTCATTTC	120
TTTACCTTGA AACGTGAAAG TAAATCAGTG AGATCAGTGT TGCTTCTGCT TTTAATTTT	180
TTCACAGTTC AGATTTTTAT GTTTTGGTT CATCACTCTT TTAATAATGC TGTGGTTCCC	240
ATCAAACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```

GAATTCGGCC TTCATGGCCT AGGATGTTCA CTTGCATGCC TCTGGATTTT AAAATTATTG      60
TTCACATGAC TCCTTTTCTG TCGTTGTTGA AGCAGCTACA GAGCAGTAGA ATCCACTGAA      120
TTGGTACACT GAAGCAGGCA TGCCATTTAA ATGAAGGCAG TTAACCTTGA CTGTTGTATC      180
ACCAGAGTTA AAGAATTCTG GTGCCCCTCT TTAAGTCTTC AGGAAGTGTT TAGAGGCTTA      240
TTCACATTAG TTAAACAGG CCCCCCCCAC CTTCCCAAG GCAACAGAAA ACATAACCAT      300
TAGCTCTCTT CCTGTCTTCC TTCCTCATT CATGCTTGCT TCGGCTGCTA AACTGAATTT      360
TTGTTACTTA GAATATTATA AAGTGTGGAT GCTTCTATA ATGCTATTGG TCTAAGTGTG      420
ATTAAATTC ATTAAGGTGT ATAAGCCTCT AATTATTACA TAACTGGCAC TGGCTCGAG      479

```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```

GAATTCGGCC TTCATGGCCT AGCCTATTAC ACAGTAAGTT AATAATTGTG TCCTTGCAAA      60
TAAGCATGTG GTTCTGAAAT GGAATCAGCA TATTCCCTA TAAAGACACT TCCACTCATT      120
CATTAAATTGA GCAGCCCCAG TTGATAAAGA ATCAGTATAT CATGTTCTGA TATTTAATCA      180
GCAAACTCAT TTATTCAGTA GAAATTGAA TTCCTGTGAT GTGCCAGGCT TGTGAGGAGG      240
GAGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```

GAATTCGGCC TTCATGGCCT AGTCGACTCC TGTGAGGTAT GGTGCTGGGT GCAGATGCAG      60
TGTGGCTCTG GATAGCACCT TATGGACAGT TGTGTCCCA AGGAAGGATG AGAATAGCTA      120
CTGAAGTCCT AAAGAGCAAG CCTAATCAA GCCATTGGCA CACAGGCATT AGACAGAAAG      180
CTGGAAGTTG AAATGGTGGA GTCCAACTTG CCTGGACCAG CTTAATGGTT CTGCTCCTGG      240
TAACGTTTTT ATCCATGGAT GACTTGCTTG GGTATGGAGA GTCGGCTTGA CTACACTGTG      300
TGGAGCAAGT TTAAAGAAG CAAAGGAAGT CCTCGAG                                     337

```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```

GCGATTGAAC TCCTGACCTC AAGTGATCTG CCCACTTGTG CCTCCCAGAA CTGGGATAAA      60
AAAAAAAAAA ATAGATCCTT GGTATTATTC CATTACATAC GGATTGTAAA ATTCAGTTAA      120
ACATTCATCT CTTGGTGGGC ATTTATGTAT TTCTTTTGTG TGTGTGTTG CAGCATTGCT      180
CTGTTAAACC TTTTATAAG TACATCTCGA CTCGAG                                216

```

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```

GAATTCGGCC TTCATGGCCT ACCACATTG TAACGGAGCC ATTGAAGCAT ATTGGAAAAG      60
GAACTGGGGA ATTTATTAAA GCACTCATGA AGGAAATCC AGCGCTGCTT CATCTTCCAG      120
TGCTGATAAT TATGGCATTG GCCATCCTGA GTTCTGCTA TGGTGCTGGA AAATCAGTTC      180
ATGTGCTGAG ACATATAGGC GGTCTGAGA GCGAACCTCC CCAGGCACTT CGGCTGGGA      240
TACTCGAG                                248

```

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```

GAATTCGGCC TTCATGGCCT AGCCTTCCTC TACCATTTT AATTTTTTTA GACTTCATT      60
TGTGATTAT TGCTGCTCTG GGGGCTTCAC ATCCAATCCT TTTATGGTTT CATCTTTCCT      120
TTCCTTACAT TTGTGCATA TAACAATGGC GTGTTTAGCT ACTGCAGTGA AAAATCAATC      180
AAGCCTATTC CATATTCACA GGCTTGCAAT GGCACCAACG GCTCCTGGAT CTCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC TTCATGGCCT AAGTTGATCC GGATACACAC CTGCTAAAAC TGCTTAAAAC	60
ATTAGAAGGA CATGCTTATG GCGTTTCTTA TATTGCATGG AGTCCAGATG ACAACTATCT	120
TGTTGCTTGT GGCCAGATG ACTGCTCTGA GCTTTGGCTT TGAATGTAC AACAGGAGT	180
CTCTCGAG	188

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC TTCATGGCCT ACAGGCATGT TGAGATTTCG AAAAGTGGAT GTAAGTGA	60
TTCAGATAGC TTTAGTGATT GTCTTGTGT TGTCTGCATT TGGAGGAGCA ACAATGTGGG	120
ACTATACGAT TCCTATTCTA GAAATAAAAT TGAAGATCCT TCCAGTTCTT GGATTCTAG	180
GTGGAGTAAT ATTTTCCTGT TCAAAATTATT TCCATGTTAT CCTCCATGGT GGTGTTGGCA	240
AGAATGGATC CACTATAGCA GGCACCACTG TCTTGTCACT TGGACTCCAC ATAGGACTAA	300
TTATTATACT GGCAATAATG ATCTATAAAA AGTCAGCAAC TGATGTGTTT GAAAAGCATC	360
CTTGTCTTTA TATCCTAATG TTTGGATGTG TCTTTGCTAA AGTCTCACA AAATTAGTGG	420
TAGCTCACAT GACCAAAAGT GAACTATATC TTCAAGACAC TGTCTTTTGG GGGCCAGGGC	480
TCGAG	485

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC TTCATGCCTA GTGGATCCGG AAAGTCTGTG GCTCTAGACT TTCAACTATT	60
TTATTTTTC TTTTGTATTT TTGTTTGTG GCTTGCTTTT TTACAATGGG AACTAGAATG	120
TAAGATGCCA AACTCAGCCT GTGGGGAACA TGGATTTC CAACAGCAAC CACAGAGCGT	180
GGTTCCATT TCTATCCCT GTTCATGTGG GAGGCAGAGA AGGAAATCAG GTGCTCAGTT	240
CCAGGGACAT CACAGGACAG GACTCGAG	268

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:


```

GAATTCGGCC TTCATGGCCT ACACCTCTTC TGCCAACCAG CTGCTTGGGA TGACTGCGAT      60
CCCGTGTGGCT TGTCTGGGTA TCTTCCTGGG AGGTCTTTTG GTGAAGAAGC TCAGCCTGTC      120
TGCCCTGGGG GCCATTCGGA TGGCCATGCT CGTCAACCTG GTGTCCACTG CTTGCTACGT      180
CTCCTTCCTC TTCCTGGGCT GCGACACTGG CCTGTGGCT GGGGTACTG TTCCTATGG      240
AAACAGCACA GCACCTGGCT CAGCCCTGGA CCCCTACTCG CCCAAG      286

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGATGATCAT TCTTTCTTG CTTCTAGGCT      60
CTGTGTCCTC CTGGTTTCCT CCAACCTCTC TGGTCCTGTT TCATTGCTG TGGGTTTCCT      120
TTGCCTTTGC CACCCCTCAA ATGGGGCTTC TCACTCACAC TAGTGAGTTT TCAGTGCTTG      180
CAGACCCAAC ACCCTCTTTT TATAACAAAT ATTTTTTAAT ACGTCCTTTT CCACAACTCG      240
AG      242

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGTCCCATCA GAGGGAGCTG ATGAAGAATG GTCCCTGTAA      60
GTAAGTCACT AGGTTCACAA ACTGCCTGGC CGAGCACTCA GCCCGTGGAG CTCAGGCCAA      120
CACCAGAGCC CCGGTTT TAG GGGCCAGGAG AGCAGGTGAC CAATTATTTG GGGAGTCTTG      180
GGTAGAATTT CCGCCACACA TTCTCCCAG GGCTGCAGGG GTCTTCCGAG GCAGGGCGGT      240
GGAGCAGGAT TCAGGATGTG GTGGGAATAG ACTGAGGGGC ACTGGGTGCT GCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTCGGCC TTCATGGCCT AAAAACTAG AATAATGGAA GAGTAAATAA ACACAATTCT      60
TAATGTATTA CAAGAAATAA AAGGTTTAAA AGTAGATTTT TTAATTGAAA AGAATTAAAT      120
CAGATAAAAA TATTTGAGAG GTAATGCAAA CATTTAAGTT TGTCAAAGAA GCTTCAACAT      180
CTGGATAATA GGAAAGAAAA AAACCAAGC AAAAGAAAAA TAAGCCACAA ACTAAAAAAT      240
GTTTAGTTCT TGAAATTTAA AAAAGTAAAT ATTGAAAGAG CATGCTGTGT ACCTGAGATT      300

```

ATTTACCCAA AACTCGAG

318

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CTCGAGTCTG GGCACCCTGA	60
GCAGCAGCCT GAGCCGGGCC AAGTCTGAGC CCTTCCGCAT TTCTCCGGTC AACCGCATGT	120
ATGCCATCTG CCGCAGCTAC CCAGGGCTGC TGATCGTGCC CCAGAGTGTC CAGGACAACG	180
CCCTGCAGCG CGTGTCGGC TGCTATCGCC AGAACCCTT CCCCCTGGTC TGCTGGCGCA	240
GCGGGCGGTC CAAGGCGGTG CTGCTGCGCT CTGGAGGCCT GCATGGCAAA GGTGTCGTCTG	300
GCCTCTTCAA GGCCAGAAC GCACCTTCTC CAGGCCAGTC CCAGGCGGAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC TTCATGGCCT AGTCATGGAA CAAGTCCTTG CTAAACTAGA AAACAGGACT	60
AGTATTAAGT AAACAGATGA ACAAATGCAA GCATATGATC ACCTTTCATA TGAAACACCT	120
TATGAAACCC CACAAGATGA GGGTTATGAT GGTCCAGCCT GGGTGACAGA GCGAGACTCT	180
GTCTTATAAA GAAAAAAAAA AAAAGAAGTG GCAGCTCTGT CTGCTTCTCA CAGAGTTGCT	240
AGGGACAAGT GCTGAGGAG GCACCTGCCC TTGGGCTCCC CGGGTGGGCT GCTATTTGCC	300
TGTGGGCTCT GCCTGCCCCG CTGTCCAGTC CCCGGGGTGG CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GCGATTGAAT TCTAGACCTG CCTCGAGAAC AGGGAACCTT CAAACAAAAG ATATATCATA	60
GGAAGTCAGG TGAGAAGCTG TCAACTGGGC AGGCAGTGAT GAGAATCGTA GTTGTCTTAC	120
TGTACTTTTT TGTTTTGTTC AAAAACCTA AAGCATCAGC CATTGTGAAA GCAGAGTTTG	180
CAGAGAGCCC CCAACAGAGC CAGAACTTGC CAAGAGCGAC TGATATTTCT AGAATCCAC	240
GAGGCAG	247

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```

GAATTCGGCC TTCATGGCCT ACAACATCAA AACTCCCAAG CAAATGGATG AATTCATTGA      60
GATCCAAAGT TCAACAGGAA CCTGGTACCA GCGCTGGCTG GTCAGATTCA AGACCATTTT      120
CAAGCAGGTC TGGGATAATG CCTGTACTG TGTGATGGGG CCCTACAGAA TGAATACACT      180
GATTCTGGCC GTGGTTTGGT TTGCCATGGC ATTCAGTTAC TATGGACTGA CAGTTTGGTT      240
TCCTGATATG ATCCGCTATT TTCAAGATGA AGAATACAAG TCTAAAATGA AGGTGTTTTT      300
TGGTGAGCAT GTGTACGGCG CCACAATCAA CTCACGATG GAAAATCAGA TCCACCAACA      360
TGGGCCTCGA CCTGACTTTG CCCCCTTGCC CATCAGCCAT TTGCCATCAC CCCAAACAAC      420
TCAGCTTCGG GGAAGTCTCG AG                                         442

```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```

CCGAGTGACC TTCTTGATGC TGGCTGTTTC TCTCACCGTT CCCCTGCTTG GAGCCATGAT      60
GCTGCTGGAA TCTCCTATAG ATCCACAGCC TCTCAGCTTC AAAGAACCCC CGCTCTTGCT      120
TGGTGTTCTG CATCCAAATG CGAAGCTCCT CGAG                                         154

```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```

GAATTCGGCC TTCATGGCCT AGTTTACTTC TGCTTGATCT TTATCTTCC TTGCTACTAA      60
TTTTGGATTT AGTTTGTCT TTTCTAGACA TTCATTGTTA GATTGTTTAT TTACAATTTT      120
TCTAGTTTTT TTGATGTAGA CATTTA                                         146

```

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

```
GAATTCGGCC TTCATGGCCT AGATGTTGCC AGTTTTCATG GAGGAAGTAG ACATGAAAGC    60
TTGTTTGTA TGTGTTTGAC AGAGTAGAAA GACATTGAAG AAGGTGATGG TATACATCAC    120
TTGAATATTT TTATTGAAAA GGGAGGGAGG AAATGGAGCG TTAGTTGTAG GACCAGATGA    180
TGTAAGAGA GTTTTTTAAA GTGTACAAA CAATGGCATG TTGTGATACT AATGAGAAGG    240
AGCCAATAGA GAACAAAAA TTGATGATGC AGGAGACGAC TCGAG                      285
```

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

```
CTCGAGGGAT CTGGCTTCT CTGTCTTCTC ATTTACTACA TNACGCTGGT GAATTAATAG    60
ATNTCTCAAC AAAAGGACAT TTAATCAAC ATATGACACC TGTTTAAATT CTTAAGAAGC    120
CATTAAATTAC ACATTCTTAA GAAAATGAGC TATGACACAA CTCTTCTCAC TGTATAACTC    180
CTATCTGTGA TTCTCAATCA GGTGACTTTT CAGCTNCAAG ACGGATCTTT TCTATTCATC    240
TCCTCTGGTT CGGACCAATT AAATGINTTC TTTTGCAATC ANACATCTC ANNTGCCAAA    300
TCTTCAAAG CAAAGGAGTT NGTTAGCAAC ATATTAGGCC ATGAAGGCCG AATTC          355
```

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```
GAATTCTAGA CCTGCCTCTG TATGTTGCTT TAGCCAGGAT TCAGAGCTAA AGTGTAAGTG    60
TGTGCTTCTG CTTTCTGGAT GTATCTCTCA AAATTGCTCT GTCTGTTTAT TCAGTCTCTG    120
GATCTACCTT CTCTTTTCTT TGAATTGGAC ACCATTCATG TCATTGCTCA CTCAGAACTT    180
CAGCTGTTCT CATGATCACA TGCTTTCTTC CCTGTTTATG TCCAAT                    226
```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCGGCC TTCATGGCCT AGTCTGCTGC TTAGCTTGTA TTTTCAGTTT AATATATTCG	60
TGATCATTAA CAAAACAGCG AAGTGAATAA TGGGCATAAA TTTTCCTAAG AAGAATCATT	120
TTCCATACTT ATTTTCAAT ATTATCAAAA AGTATGTAAT TTTGGGGGT TTTTGGTTT	180
TTTTTTTTT TGAAACAGAA TCCTGCTCTG TTCTCGAG	218

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCGGCC TTCATGGCCT ACTTTGAACA ATTCGGCATG AATTGAAACC AGGTTTTCCT	60
GTGGAAAGTT ATAGCTTGAT TGGGAGATAG AAGTTGAATT GAGTTCTTTC TTGCAACTCT	120
TAGTGTATAT TTTTATATCT CAGTAAGACG AGGATACCTT CAGTTTGAAT CTGCATAATG	180
TTCAC TGCCA AACTCCTTCT CATTTAATGC TTATGGCCTT CACATTCTG TATAATAAAG	240
ATCAATTATC AGCACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTCGGCC TTCATGGCCT AAGCATATGA ATTTTGGAGA GACAGACATA CAGACCATAA	60
CAGTTCTATT TTCTATAACT ATAGTAGAAT ATCGAAATGA GAACATTGAC ATTGGTAAAA	120
GGTGATGTA TAGTTTATAT GTTATCTTAT CAAAAGGGTA GATTACAGA ACCAACACAA	180
GTAAGCTATA GAACTAGCCC ATTACCACAA AGATCTCCCA CAAGCTACAG CTTTACAGTC	240
ATACCCACCC GGCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAGGACCTTT ATAATCTACT ACTAATTACT GTGAAAGTAA ACATTGTTTA ATATACCAGT	60
TCTTAAAGAA ATATTTTGTC TAGTCATTAA TATTCTAGTT CATCTCAAAG CTTCATTG	120
ACAATTTAAA ATTACTTAAA TTTAATATT AAAGGAAACA GTTTTCCTGA TTCTCATGAA	180
AGTCCTATT TGCACTGAAG ATGACTAAAC CTTTATAGTCA TAGTTTTAGA AGAATTGGCT	240
TTTTTATAGC CATTTTATTT ACATATGGGT ACGGACTCGA G	281

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

```
GAATTCGGCC TTCATGGCCT ACTCAGAAAA GAAAATGAAA ATACCTCTAC ATGTGGTCTT      60
CCTGCTAATC TCTCTGACCT TCCTATTCAC CACCCTCCCC ACTGCCCCACT TACTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GCGAGGATGG CATGGACGCT TATCGAGCAG CTTCAGGGTG GCAGCTACAA GAAGATTGGC      60
TACTATGACA GCACCAAGGA TGATCTTTCC TGGTCCAAAA CAGATAAATG GATTGGAGGG      120
TCCCCCCCAG CTGACCAGAC CCTGGTCATC AAGACATTCC GCTTCCTGTC ACAGAAACTC      180
TTTATCTCCG TCTCAGTTCT CTCCAGCCTG GGCATTGTCC TAGCTGTTGT CTGTCTGTCC      240
TTTAACATCT ACAACTCACA TGTCCGTCTC GAG                                273
```

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GAATTCGGCC TTCATGGCCT AAGCAGTTGC TAATGCCAGC AGTACATAAA TTGAGGATGG      60
AGCAAAAGGA TCGACACCAC CAATGGCTGC ATTGTGATAG GTGTGGACAG AGCCTGCCAG      120
AATTAAACAC ACGCCAGGAC TCGAG                                145
```

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GGATTCGGCC	TTCATGGCCT	AGTGTTTATA	ATTAATCCTT	TAATATTATG	GTTATTAACC	60
TCTTAAACAT	GAATGAATTC	TTGATTGTTT	TAACACAGTA	CCTAAGACTA	ATGCTTTCTG	120
TGGACACCAC	TGAGCTCTGC	CTCAACTCCA	CCCTCTGCGA	CCGGAGGACT	ATGCCCTTAG	180
TAACTGCTGT	CGGTGTGGAC	GCTGTGCTGG	TTCTGTTTTC	TAAAGGAGCA	GAAGCACAGG	240
TCTCTGAGAC	AGGATCGTTG	TCCCTACAGG	AGGAACAGTG	GCCACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCCT	CCCAAAGTGC	TGTGATTACA	GGAGTGAGCT	60
GCCACGCCCA	GCCTACAAGT	TTTTCTTTAA	CTACTGCTTT	AGTCAACCAT	ATCCTCTAGC	120
TTCTGATATT	TTCATTGTTT	GTGTGCATTT	TCTAGATATT	CAACAATTTT	AAATTAGATT	180
TTCTCTTCGA	CTAAAGTGGA	AGAATTTTTT	CCCGTTTATT	TTCTACATGC	TAAAGATTTT	240
TATTTTCATT	TTGTTATTAA	TTTCTAGTGT	TACCGTATTG	TCATTAGAAA	ATATGGGCTG	300
GCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

GAATTCTGAA	AATATTAAAG	TTTATCCTAG	CACTTACGTT	CAACATACCA	TAATTTTAT	60
ACTTCTCCAT	CTAAATAAAA	CCAAGTTTGT	TCCTACACTA	GTCCAGCCTG	CATTCTCAAG	120
AACTCCAGTG	ATTATACATC	AACATCTAGA	GATCAGGTAT	CCCAATCCTT	TCTTCCTATA	180
TCTAAGCTAA	CTCCTTCTTA	GCCAAATGGT	ACCCTTTGAT	TTTGTGTTAA	TCCTTTCCTT	240
CCCTCCACTC	TTAACCCTC	TCATTCCATC	TTCTCCCTCC	CTTTTCCACC	CCACTCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GAATTCGGCC	TTCATGGCCT	AGGTTAAAGT	TGCTGGTAA	TAAGGTGGAG	TGGATTTGGG	60
GCAGGTTTTA	TGTTTGTGTG	CTTCTCTTAG	AAGTCAAAGA	GTTGGTGAGG	TAAGTCAAT	120
CCTGTCTATA	TCAGTGTAGT	GATAATGCAC	TAGTGTAATG	AAGAATGGAG	CTGCACGTGT	180
GAGGTTTTTC	AAGTCCACAA	AGATCAGGTA	TTGTCTACGG	TCAATAAAGA	TTTTTTTAAA	240
AAACCCCTCT	AACTAAAGAG	AGGTAACTTC	CTTTTCAAAA	CTCTGAAATT	TACATGTGCT	300
GACTTATAAT	ATGTGTGATC	CTCGCTGCTT	TTCTGATCCC	TGGTGGTTGG	GGTGTGTGTG	360
TGTGTGTGTC	TGTGTGATGG	GCTCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC	TTCATGGCCT	AATCTTAAGT	GTTTTACATG	CTCTACCTGC	CGGAATCGCC	60
TGGTCCCGGG	AGATCGGTTT	CACTACATCA	ATGGCAGTTT	ATTTTGTGAA	CATGATAGAC	120
CTACAGCTCT	CATCAATGGC	CATTGAATT	CACTTCAGAG	CAATCCACTA	CTGCCAGACC	180
AGAAGGTCTG	CTAAAAGGTC	AGAGTAATGC	AGAATGCGTG	CCTTCATCTC	AGATTGTTC	240
ATCACAGGTG	GATCCCATGT	GTCTTCAGTA	GACAAGTCAC	CTTTGTAGCT	AGCACCAGTG	300
CCAGCTCCAT	GCCATTGCAC	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCCA	ATCATTTTTA	AATCTAATCT	GAACTTTAAC	60
TGGTTAGTTG	AGTGCAATTT	TATGTGTACT	GATGTATTTG	CATTTATTCC	TTACCACCTT	120
ATTTTGTGCT	TTTTATGTTT	TTTTCTTCCA	CTCTTTTTTT	TTCTTTTGGA	ATCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

GAATTCGGCC	TTCATGTACA	TAGATCTTCC	TAGTGTCAAT	GACAAAGGTG	ACATTTGCAA	60
GGCTTTTTCT	TCATCAGATG	CAGGGATCTG	GACTTCATGT	GTATCCTTTT	ATCCACTCCT	120
CCTCGAG						127

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GAATTCGGCC TTCATGGCCT AGAATTTAAT TGCAGAAAAT TATTCATATT CTTATAATCC      60
TTTAAATGTC TATAGGATTT ATGATGATAT CTCCCCTTCC ATCCTGATTT TTTCAAGTTT      120
TTGTTTTTTC TTTTCTTCTA TAAATTCTGG TAAATGTTTA TTAATTTTAT TCATTTTAA      180
AAAGAACCAG CTTTGGTTT CATAAGTTT TATAATTTT TTGTTTTCAC TTTCATTAAT      240
TCTACTCTTT ATTATTTCTT TCATTTTGTT TACTTTGGGT TTGTTTGCC ATTTTTC      300
TAGTTTCTTA AGGTGCCAGC TCGAG                                           325

```

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC TTCATGGCCT AGGCACACAG GCGGGGCAGC AACATAAAGC GCACCCATTA      60
AAAAGCAAGA CTCGCTCTTG AGACTAAAGG AGAAGTTACC TAAATTTCTG TATAAACTCA      120
GTAATTCATT CACTTTACTA GTATTACATT TATGAAATC ACCTTTGTGG AAAAAGGAGC      180
GGGAGAGGGA TAAGAAAATG CCTGTTTCTA GAAAACGCTC GAG                                           223

```

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC TTCATGGCCT AAATTCATAC AGAAGACCTT ATTGTGATAA AGTTCAACGG      60
TATAGGTAAA CAACAACAAA AAAACTATCA ACCATAATTT TTTCAACCTA CCAACATTCT      120
CTGAACCTTT CAGTAATATT TTATACACAT GTGCATATTC TGCCTTTTTT ATTTACTATA      180
TCATAAACTT CTTTCTAGAT CATTATTTT CTGCTGCATT TTTTCAGGAT TTATCACCTT      240
TATTTTAGT TTTAGTTTT GTGAGTGATC TCTCGAG                                           277

```

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

AAATGAGCCC	TATCACTGAG	AAATACGTGT	TTCATGATTT	AACTCTGTGT	GTGTGTGTGT	60
GTGTATTTTT	TTTTTGTTG	TCTTCAGCTG	ACAGTATGAA	AAATGAAACT	GCTGAAAAAG	120
CTGAGCACCT	GGTCAACCCT	GGCCTTCCAT	TGCTTTGGCC	TTCAGTAAAA	AGCAGCCTCC	180
CTTCTAGGTC	AGGGAACCAT	GCCATTGAGA	CTAGTAACGG	GCGTTCTGGG	CACAGTCCCA	240
CTGTGCACAG	GTTTGAGAGG	ACAAGTTCAT	CAGAAGGAAG	GCAGTCCTTA	GAAGTCACAT	300
ACGTTGAGCC	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATCGGCC	TTCATGGCCT	ACATTCAGAA	AACAGAAAAG	TTTCAAGAAG	CAGGAAGAAA	60
AGACTCACCT	ATGATCCCAA	CACCCAGAGG	TAATAATTTA	CAATTTTGG	TGTATCTTCT	120
TTGTCTTTTC	CTATGTGTTG	CCTTATGTAG	ATATGTAACA	GGTTGTGGTT	TAAACCGAAG	180
CTATACCCAT	TGTTTGGAGT	CAGGCAGGTG	CGATAAATTT	GTAGGTGGCT	CACCAGAAAT	240
CTATTTGCAT	GATGAACCTA	CAGGACTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 349 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GAATCATTTT	TGGTCACCAA	TCTCTCATAT	ACCACTACTG	GATATTTACA	ACATGCTTCA	60
GTGGAGGAGA	AGACACTGCT	GCTTTGCAAA	GATGACCTGG	AATGCCAAAA	GGTCTCTGTT	120
CCGCACTCAT	CTTATTGGAG	TACTTTCTCT	AGTGTTTCTT	TTTGCTATGT	TTTGTTTTTT	180
CAATCATCAT	GACTGGCTGC	CAGGCAGAGC	TGGATTCAAA	GAAAACCCTG	TGACATACAC	240
TTTCCGAGGA	TTTCGGTCAA	CAAAAAGTGA	GACAAACCAC	AGCTCCCTTC	GGAACATTTG	300
GAAAGAAACA	GTCCCTCAAA	CCCTGAGGCC	TCAAACAGCA	ACTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

GAATTCGGCC TTCATGGCCT ACCTGGATTT CTCAATTTAT TAAGTTGTAC TTACCTGATG	60
CTGATGATGA TTAAGTATTT TACACATTGT CTCAGAGCTC ACTCTTGCGG AGGTTGTGGC	120
CTCGAAAATG CCTTGTGTC CCTCTGGAAT CTGTCTTTTC AGCTTCATCT CCTCCTCCTC	180
ACCTCCTGCT GTGGTGCACA GATACCTATA GGCAGGCTCC ATCTCCTCCT CCCAGCTCC	240
TCCCCTAGTG CACACCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCTAGA CCTGCCTCGA GTCCTACGGG AAACCTCCAG GGTTTTAGGA AGCTGACGAT	60
GCAAGTTTAT CCAAATGGGA ATGATAATAA TCATGTTTAT TATCCTGGGG TGCTTTCTCC	120
ATAGCAAGTA CTCACCTAGG TCCTGTTCAT TAGTCAGTCT TTTAATCTGT ACTGAAATAG	180
GTGCTGTCGC ATCCATGGGG AATGAACTCG AG	212

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

GGTTGCAGTG AGCTGAGATC GCACCACTGC ACTCCAGCCT GGGCAACAGA GTGAGACTTC	60
ATCTCCAAAA AAAAAAAAAA AAAAAAAGA CAACCACAAC AAAAACGAAA CACCACCACC	120
AAAAAAGTTT ACTGGTAGAG TCTCCTCTAG ATTGTTTCT TTTCAATACT TGTTTCATAT	180
TCTCCAAC TG CCTCGTCCC ATAATGTTGG CTGTGCTTTT CTTTGTGCTT ACAGCTCATT	240
GCTGGGATGG ATATGGTGAG TTTTCATGTA CATTGACCAA ATACAATCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AGGCTTGAAA GGAAATGAGG GAAATTTTCTG TGAGTTTGAG	60
--	----

GAATGGCAGA	CTGGGTATGT	GACAAATGAG	TGGGTAAATA	AGGAAATCTC	AGATTGAGAA	120
TCCTGGCAGA	TCTTTCAATG	GGTTAGACTG	CAGGAATATT	GATTTTAAAG	CCAGACTGAA	180
GCAAATTCCTA	GTGATAAAGG	AAGGGGAAAG	GGTGGCTGAA	TCAAATGTTC	TACCAATACT	240
CCTTTTTTTA	GTATTTGAGT	TAAAATTCAG	ATTANATGCT	TGGCTTAGAA	GAATGCAAAG	300
CTTCACTGAG	CCTAATAATA	TGGATCCCG	TGGGTGAGTG	GAGGTGAGTT	CACTCGAG	358

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GCTCGAGAGA	GCTTTTTTTT	TTTTTTTAA	ACATTGTATC	ATTAATTTAT	CACGTGTATC	60
CAAGCTCCTT	TGAGTTTCCC	TGCCCCATC	CCTGTGTCAT	TCCAGCCATA	TCCAGCTACT	120
CCTTCCATGC	TTCCCCCATT	CTGTCTCTG	ACTCTATTAC	TCCCAGTCCA	AATCTTGCTC	180
TTCACTGTCT	GCACCTTGTG	CTCTCCTCTC	TCTCAAAAAA	TCTACCCAAA	TTCCACCCCT	240
CTTCACAGGC	CCCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

CAAGCCGGCC	ATATTAGAGA	GATGGAAATA	AAGCTTCCTT	AATGTTGTAT	ATGTCCTTGA	60
AGTACATCCG	TGCATTTTTT	TTTAGCATCC	AACCATTCCT	CCCTTGTAAT	TCTCGCCCCC	120
TCAAATCACC	CTCTCCCGTA	GCCCCCCGA	CTAACATCTC	AGTCTCTGAA	AATGCACAGA	180
GATGCCTGGC	TACCTCGCCC	TGCCTTCAGC	CTCAGGGGGC	TCAGTCTCTT	TTTCTCTTTG	240
GTGCCACCAG	GACGGAGCAT	GGAGGTCACA	GTACCTGCCA	CCCTCAACGT	CACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCCTAC	TAAATAATAT	TAAGCAGGAA	TTTTTTAGGT	GTTGCTTTTT	AGCTCCTTTT	60
TATCAGTTCT	GGGAAGCAAA	CAGTGCTGCA	TCTCCTTTGC	TCTCATAGAA	TTCTGTAATT	120
TTTATACCAC	AGGTCTCTGC	TAAAAGGCGG	CATGTGTTTA	GAAATTCTAA	AAATGAGGGC	180
TCTGAACCTT	GTAACGTGCC	TGATACGTTT	TCCCTTTTTT	AATCCCAACC	CCCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT ACAACTTGCA CTTCGCTCCA GCATCACTGG CCTCCTGCTG      60
TTATTTAGGT ATACTAGGCA TTTCTGTTT TAGGGCCTTT GTACCTCCAG TTCCCTCTGT      120
TTGGAATGCT TTTCCCCAGA TAGCCCTGTG GTTAAATCTC TTACTTCCTT TGGGTCTGTG      180
CTCAGATGTT ACTTTCTCAG AGGGTCCCCC AAGCCCCCAT GCACTCGAG                    229

```

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT AGAGTCTATT AACTATTTTT CTGTTATACC CTGCCAGAAA      60
AGAATTTTAA AAGTTAGTTT ATGTTTTGTG TAACCATGTT CTTCAGAATG CAGGTATGTG      120
AGCATCATGG TTTCTGGGTA ATTCTGCTGC TCCTGTCTTT GAAAATGGAG ATACCACTTG      180
CAGCTTATCC CACTGCTGAG TATTCAGCA TTGGTAGTGG TTTCACTCCA TTGCATCCAT      240
CCAGAACTTT CACACAGGCC TCCCCATTAC CCAGCATCCT CGAG                    284

```

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGGCCT AATAAAATAA AAATTGGAAG AATGGCATT TATTACAGTA      60
TAGTTAAGAG ATTGGCTAAG GCAGTAAATA AACTTAGAA ATGCTCAAAT TTATTGTAA      120
TTGCTTTTAT AATCATTGAT ATATAAGCA TGCTACTGCT AATCAATTAG TTTTATGTAT      180
TAAGACCTAT CAGCATGTCT TTTTCTTAGT ATCTGGTTGA CTTAAACATG ATGTTCTCTG      240
TACCATTTAA CATTTTCAAG ACATATTCTC CCCAACTCG AG                    282

```

(2) INFORMATION FOR SEQ ID NO:442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACTCACCTGC AATCTATTGT TTATATTGTT GCTATGTATC   60
TCTATTCTTT CTGCATCAAA TAATGAATAG CTCATTTTGT GTTGCCTTCA AGTATGACAA   120
ATTCTTTTCC AAATGTGATT CCAGACAGTA TATCCAAACA TGTCTTTTCT TTCCCATTCC   180
TGATCATCCT ACATGTCAAG CACTGCCAAC GTTTACTCAA GAAAGCTTGG TTAGAACCCA   240
G                                     241
```

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
GCAAGCACAA ATCTAACCAT GAGCTTCAGC AATCAGCTCA ATACAGTGCA CAATCAGGCC   60
AGTGTTCCTAG CTTCCAGTTC TACTGCAGCA GCTGCTACTC TTTCTCTGGC TAATTCAGAT   120
GTCTCACTAC TAAACTACCA GTCAGCTTGG TACCCATCAT CTGCTGCACC AGTTCCTGGA   180
GTTGCCCAGC AGGGTGTTC CTTGCAGCCT GGAACCACCC AGATTTCAC TCAGACAGAT   240
CCTCTCGAG                                     249
```

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT AGGGATTTTT TTTCTTTTTT TTCCTCATAT GTGAAGTAAT   60
AGTCTCTTCA CAACAGAAGA AGCCACAAAA CTAACTTAT TGGTCACTGA ATTTTCTTCA   120
AGGTTACGTA CCTCTTTGGT ATTTTAAATC TAGATTATGT TGATTTTAT ATTTTGTTC   180
TCATTTTCT ATTTCTTGT TTTCTTACT GCAAATGGGC TCGAG                                     225
```

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGTTTTGGAG AGCTCTACCT ACTAGCTGGT TATTTCCTAC      60
ATTAAATTAA TACCTTTAAA AAGTATTATG AAAATAACAC ACTCAGTAAA AGAAATTTTA      120
AAAAACAAAT GCAATAAAAA TGTGTTCTT TTCAACCTTT GACTTGTCAC TTCCTCCAGC      180
TTTCCCTTA TTAACTGTG AGAGGTATTC TCTATTAGCA GTTACTTATC CCCTTCCTCA      240
AACTCGAG                                         248

```

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GGATTGAATT CTAGACCTGC CTCGAGCGAC CTCTAGAATC CTACATTGA AATATTCTGG      60
CAGTGAGGTG TTCATCCTAA CTCAGTCAGG TAGCTGTGGA CAGCCTTCAC CTGTTAGGAG      120
CTCCTTAGAA ATAAATTCTG AATACCTTTG GTTTTCTTTT ATCCTCCAGA GGAATTTCCA      180
CTATCTCCGA AGCTGTTCTT TGTTCCACTG ACAATTCGCT TAGTTAATGT TCTTTTCTAG      240
CCTGTACTAT CTCGAG                                         256

```

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAAGGCAAGA AAATCTATGG AAAGAGAAGG CTACGAGTCC TCGGGCAATG ATGACTACAG      60
GGGTAGTTAC AACACCGTGC TCTCACAGCC TTTATTGAA AAGCAGGACA GAGAAGGTCC      120
AGCCTCCACG GGAAGCAAAC TCACCATTCA GGAACATCTG TACCCCGCGC CTTCATCACC      180
TGAGAAAGAA CAGCTGCTGG ACCGCAGACC CACTGAATGT ATGATGTCGC GATCAGTAGA      240
TCACCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 198 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AGCTGGGGGG AATAGGTTAT GTGATAAGGA GTCAGTCGGA      60
CAGAGTGGGG TGAAGATGT TCAGACAGGG AAACACACAT GCAANAGAGG GAAGGTGGGA      120
CACAGCATAT GCNTCCAACA TTTGGTAGGG CCGAGGCCCC ACATGGGAGC AGTGAGAGGT      180
TAGGGATCGA CCCTCGAG                                         198

```

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTTTCCT TACCAGGAAA ATTCATGCTT TACAATTTGT CAGAGGTGCA CATTACTAAT	60
TACAATAGGT CACACTTTTT CTATGCGCTT CATTATAATA TTGGCAACTT TATTATGCCC	120
CATTACATAC TGTATTATGC TCTTACTTTA TATGCATTTT GAG	163

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTGCTGA TATCTTATAA AGGGGACCTT TTTCTTTTAC ATTTCTGACG GTTTTTATCA	60
GAATGTATGT ATTAATGCTA TTTGTCTTTG TATATTTATT TTATTTCCAG CCACTTCTCG	120
AG	122

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC TTCATAGCCT AACTCAAGAT CTCCCATCTA TTAAGCAGA GGAATAACTT	60
TTGTAGGCTT AATACTGCTT TCTCACTTAG GAAAAGTTGA AATTAAGAAC ACACAGGAAG	120
GGATCATTTT CTAAGGTTTA TGTCCTCAAC ATCAAATTGA GTTGAAACTT GACTACAGGC	180
CATCTGCTCA TTCAAAGCAT TACAATAAAT CTGTCCTATT GATGATCAAA ATGAGAGCTG	240
AATTGGATGC AGGATTGGAC ATTGCAAGCT GTTCTCCCAA GTGGGATGGA AAGGTGCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC TTCATGGCCT AAAAAATAT TTATTTGACT GAATGATTTA ATATGCAGTT	60
ATGGTGTTTA ATATATCATG TGTATTGT TTGTTTAAAT ACAGACATAA CCCACAGTTA	120
TCTTGAACAA GAACTACGG GGATAATAA AASTACGCAG CCAGATGAGC AACTGACTAT	180
GAATTCTGAG AAAAGTATGC ATCGGAAATC CACTGAATTA GTTAATGAAA TAACATGTGA	240
GAACACAGAA TGGCCCGGAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GAATTCGGCC TTCATGGCCT ACTTTAATTT CTCTGAGCAG TATTTTACAG TTTTGATGTA	60
TAAACCTGGC ACAGATTATG TTCAGTTTAT TTCTAAGTTT AAGTCATGTT TTGGAATGTT	120
ATATTAAAGG ATATTTTCTT TTTTAAAAA TCTACAATGT TTATTTTATT ATTATTATTT	180
TTAATCTCGC TTCATCACCA AGGCTGGAGT AAAGTGACGC GACCTCAGCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC TTCATGGCCT ACGCACATCC GCAGTCAGCC ACCTCGCGCG CGCCTCCAGG	60
AGCAAGGATG GAGAGGCTGG TGATCAGGAT GCCCTTCTGT CATCTGTCTA CCTACAGCCT	120
GGTTTGGGTC ATGGCAGCAG TGGTGCTGTG CACAGCACAA GTGCAAGTGG TGACCCAGGA	180
TGAAAGAGAG CAGCTGTACA CACCTGCTTC CTTAAAATGC TCTCTGCAAA ATGCCCAGGA	240
AGCCCTCATT GTGACATGGC AGAAAAAGAA AGCTGTAAGC CCAGAAAACA TGGTCACCTT	300
CAGCGAGAAC CATGGGGTGG TGATCCAGCC TGCCTATAAG GACAAGATAA ACATTACCCA	360
GCTGGGACTC CAAAAC TCAA CCCTCGAG	388

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

GAATTCGGCC TTCATGGCCT AGCTGATATT ATTTCTGAGT TTTTGCTTAT TTGCTTTCTA	60
CATAGAATCA ATAAAATTGA CAACTAGCAT TGCCTATATA TGCAGGTGTG ATACTATTCA	120
GGGTACTAGT ATATTGGCCA CTCATTATGA AACTTTCAGG TCCTCATATA TTTTCTTTTA	180
TTACAATGAT CTACTTATTT CTGATAAATA TTGGATTCAT AGAGGCTAAA GGGCTGGGAA	240
AGGAAAACAT TCGTGACTAC TTACAACCAT TTGATACGAG TTGTGTCAAT ACAGACCTCA	300
CACAGCAGCA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

GAATTCGGCC TTCATGGCCC ACAAATGGT AATACAAATA AACCCTACT TACTGCTTTT	60
AATGGTAGTT TGTTTTTTTT TTTTGAGAC AGAGTCTCGC TGTGTCGCCC AGGCTGGAGT	120
GCAGTGGCGC GATCTTGCT CACTGCAAGC TCCGCCTTTC GGGTTCACAC CATTTTCCTG	180
CCTCAGCCTC CCGAGTAGCT GGGACTGCAG GCGCCCGACT CCCGGGTTC CACCATTCTC	240
CTCCCTCAGA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

GAATTCGGCC TTCATGGCCT AGGAGAATCG TGAGACCTCT ATTTCCATAT CTTTTTCTAC	60
TACTGGAATT TTTATTTTTA CCATACCCAT AAATTACTTT CTATTTTAAG AAGCAAATAT	120
ATAATTCCTC AGTTTAGTAA AAAGTTCTCA CTGAAAAGC TGGTATATGA ACTTTAGAGG	180
GCAGATTAAT CAACTGCTAA ATATTATTAA TCTTCTTCT TGGAACTTTC CAACACAAAA	240
GACAGTTTAT AGAAAACAAA GTCAGTGTTT AAAACAGCTG AATGAATAT CTTTGTATAT	300
TTTATTTGTT TTGTTTGT TTGTTTGT TGAGACAGAG TCTTGCTCTG TTGTCCAGGC	360
TGGAGAGTAA TGGCAGATG ACTGCAACCT CTGCCTCCCG GGCTCAAGTG ATTCTCTGC	420
CTCAGTCTCT CGAG	434

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG	60
---	----

CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC	120
TGGCTCTTCA AGCACCAGCC GGCCCGCTC CTGCACGAAA CCGGCCTGGC TATGATTAT	180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTTCATG TTCCGAGTGA TGTAAATAAT	240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGA	300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC TTCATGGCCT ACTTATTTTT GTTCTGTGT GTTGTTTTTA AATGTGTGTG	60
CGCTCATGTG AGTTTGAAGG GAGTTAGATG CAACAGCAGG AGCTGTGCTC AGGGCAGTGG	120
TGTTAATTAT GGAGGGCGTG GGAAGGGCTG GGAAGAGGAG GGGGTTGTAA GACTCCCCCT	180
TTCCCTCGCA TGTAACAGA TGCTGGTGAC TGAAAGTCTG TCTGCGGTTA TTGGCAAGAG	240
TGACGGAAAG CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GAATTCGGCC TTCATGGCCT AATTGAAAA TTCATAAGT TCTACCAATA CTTCGAATT	60
CAATCCAACA TCTGAGGATC TCCCTAGATT TCCTATTTCC ATGATTATAA CTCTGTACC	120
AGATGATAAG AAACATGGAT CTGACTATAC TCAATTTATT CACATATTT CTCAGTGAAC	180
TAACTTATTT GCTGAATATA ACCAGTCCCC AGCCTTCCAA CTGCCTCTCT CACTTGCCAC	240
CTCTGCATCT TCCCCACTG TCTTCCTCAG CAATCAGACT GCCTCTTGCC AAGTCATCAC	300
CACAGCACC CACTCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT ACCCTCTACT ATTTTGAAC CAAATCAACA ACAACCTATT	60
TAGCTGTTCC CCAACCTTTT CCTCCGACCC CCTAACCAACC CCCCTCCTAA TACTAACTAC	120
CTGACTCCTA CCCCTCACAA TCATGGCAAG CCAACGCCAC TTATCCAGTG AACCCTATC	180
ACGAAAAAAA CTCTACCTCT CTATACTAAT CTCCTACAA ATCTCCTTAA TTATAACATT	240

CACAGCCACA GAACTAATCA TATTTTATAT CTTCTTCGAA ACCACACTTA TCCCCACCCA 300
TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AGTACAATTT AATATAATTT CTTACAAGTT TATTACCTAA 60
AACTTTGCAA ATAATTGAAG TTAGAAGCTT TGGATTTTGT TTTTAGAGCT TAATCCTTTT 120
CTGTAAGTGG AAATCCTTTC CACTGGTTTA TTTTCCTTTT GATTTTATTT TACTTTGACA 180
CCCTAAAGGT TTAGTGTTCC TGTTTTAAA TCTACTGATC GTTCTTATG AGATTCCTTA 240
GAGTACCCCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATTCTAGA CCTGCCTCGA GAGGACGCCG GAGAGAAATG AGTAGCAACA AAGAGCAGCG 60
GTCAGCAGTG TTCGTGATCC TCTTTGCCCT CATCACCATC CTCATCCTCT ACAGCTCCAA 120
CAGTGCCAAT GAGGTCTTCC ATTACGGCTC CCTGGGGGGC CGTAGCCGCC GACCTGTCAA 180
CCTCAAGAAG TGGAGCATCA CTGACGGCTA TGTCCCCATT CTCGGCAACA AGGTAGCGCA 240
GCTGCTTTGG GGAGCTCCTC CCTACTGCCC AGCAAAACTC GAG 283

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GAATTCGGCC TTCATGGCCT AAAAAGTGGT TCCTATTTTC CTGGTTGAAC CTTGAGTGAT 60
ACACCCAGTA TTGTACCACC CAATTAGTAG ACATTATTTT TTCTTAGGTC ATATTATTCT 120
CAGCTTATAG AGCAAGAAGT TGAAGCTTAA AGGGTTAGAT TACTTGCCCA AGGTAATACA 180
GCAAGAATCT TATTTTATCC AACCTAGAGT GAATATTTCC CCCACATCTC GAG 233

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

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GAATTCGGCC TTCATGGCCT ACTGATGTTG AAGACGACAC CACGGCTTTG ATGGAATATC      60
AGATATTGAA AATGTCTCTC TGCCTGTTCA TCCTTCTGTT TCTCACACCT GGTATTTTAT      120
GCATTGTGCC TCTCCAATGT ATATGCACAG AGAGGCACAG GCATGTGGAC TGTTCAGGCA      180
GAAACTTGTC TACATTACCA TCTGGACTGC AAGAGAATAT TATACATTTA AACCTGTCTT      240
ATAACCACTT TACTGATCTG CATAACCAGT TAACCCAATA TACCAATCTG AGGACCCTGG      300
ACATTTCAA CAACAGGCTT GAAAGCCTGC CTGCTCACTT ACCTCGGTCT CTGTGGAACA      360
TGTCTGCTGC TAACAACAAC ATTAACTTC TTGACAAATC TGATACTGCT TATCAGTGGA      420
ATCTTAAATA TCTGGATGTT TCTAAGAAAC TGCTGGAAAA GGTGTCTCTC ATTAAAAATA      480
CACTAAGAAG TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAGAC      60
CCCCCGCCAG CTTCCACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC      120
AGCTTGCCCTG CCCTTCCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCCT TCTTTCCTCC      180
ACCCCTCCAT CCCCCAATGC TTGTAGACCT TCCATTCAAT CCGTCTCATC GTGCGTGGTC      240
TCTGATCGTC CATCACCTGA CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTTACATAA ATATTATACT AGCATTTACC ATCTCACTTC TAGGAATACT AGTATATCGC      60
TCACACCTCA TATCTCCCT ACTATGCCTA GAAGGAATAA TACTATCGCT GTTCATTATA      120
GCTACTCTCA TAACCCTCAA CACCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 198 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

CAATATTTCA AGCTATACCA AGCATACAAT CAACTCCAAG CTCGGAATTT TAACTTCATG	60
GCAAACAGAA AAGCTAGACT GAGTTATCAG TGTGTGAGA GGAATATTTG GCCCAACAAG	120
AGTTGTTGGG GTGGGAGGAG GGAGAGACAA AAGGAAAGGA CTGCCAGCTC TCAGAGGGTG	180
GAGATGGGGG ACCTCGAG	198

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

GAATTCGGCC TTCATGGCCT ACTGCTATAT TCAAGTTTCT CCCACTACTG TGGTTTCTTT	60
TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GGGTCTTGCT CTGTCACCCA GGCTGGGGTG	120
CAGTGGTGCG ATCTCGGCTC ACTGCAAATT ACACCTCCTG GATTGAGCA ATTCTCATGC	180
CTCAGCTTCC TGAGTAGCTG GGATAACAGG TATGCACCAC CACCCCTGGC TAATTTTGT	240
GTTTTTAGTA GAGACAAGTT CTCACCATGT TGTCCAAGCC ACCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCGGCC TTCATGGCCT AAAAGAAGAA TACTAATTAG AATTTGAGTT CTAGGGGTTT	60
TTCTTAGGTT TTTCATTCTA GACTTAGCTT TTATTCAAAC CTGTTGATCC TGCATAGGGG	120
TAGTCTAGCT TAAAAAATA AAACAATAAA CATAAATGAG CCTATTGAGT TCAATCAGAG	180
TAGGGAGCAG TTTTATTGAA CAGCACATT TCAAATTCTT CAGTTGTGTT TTGTTTTTCA	240
GCTACGTGTC TCTCTGTGAT AATGAAAAGA CAGGTTGCAA AGCCCGGGAA CTAAAATCAG	300
TTTATGTGGA TGCAGTAGGA CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCC TTCATGGCCT AGTGTAAGT GTTTTGCAC AGTGCCAGA AATTTGCAGT      60
ATTTAATGGT CCTTCCTCCT TATTTATTTT TATTACTGT TTTTGTITTT TTGAGACAGT      120
GTCTTGCTCT GTCGCCAGG CTGGAGAGCA GTGATATTAT CGTGACTCAC GGCAGCCTCG      180
ACCTCCCAGA CTCAGGTGAT CCCTTCACCT CAGCCTCCCA GGCAGCTGGG ACCATAGCTA      240
TGAACAAACA CGTCCAGCTA TGTTTGTAT TTTTGTGAA GACGGAGTCT CACCATGTTG      300
CCCAGGCTGA TCTCCAATC CTCGAG                                           326

```

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GGAAAGGTGT TGTCCCTTGT AACATTTTGG TTGGCTATAA AGCTGTATAT CGTTTGTGCT      60
TTGGTTTGGC TATGTTCTAT CTCTCTCTCT CTTTACTAAT GATCAAAGTG AAGAGTAGCA      120
GTGATCCTAG AGCTGCAGTG CACAATGGAT TTTGGTTCTT TAAATTTGCT GCAGCAATTG      180
CAATTATTAT TGGGGCATTG TTCATTCCAG AAGGAACTTT TACAACGTG TGGTTTTATG      240
TAGGCAACCT CGAG                                                         254

```

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

```

GAATTCGGCC TTCATGGCCT ACAGAAATCT AATTCCTGGT GCTATTTGCA ACTACATATA      60
TTTAAATAC AAGGAGATAA ATACCCAGAA CACATTAAGC CTACTGATT AAACAGAACA      120
TTTCAAGACT GCTACACAGA AAGGGAAGGA AGCTGTTAAC CCAGCACAGC AGCACACCTC      180
ACATATTTAC GTCTCAGAGA TTAAATGGAA AGAAAGGATC AATCAAAACC TTTAATGCTC      240
AGTTTTCACA AACACAGTCA AGTCTATCAA ATTTCCAGAT TTACAG                                           286

```

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

```

GAATTCGGCC TTCATGGCCT ACAATTAAAA GGTTCTGTTA AATTACGTCT TTCAGTCTGA      60
AATTACTCTG AGAATTTACT TAAAATTTT CCATTTAAAA ACAGGTATAA AATTAATTGC      120
TAGTTTCCAT AATCACCCAG TATAAGATA GAAAAGACCT GTAAGACAAC TGTGTGTTTA      180

```

AATACATGAT AACACATTTA CGTGCCCTTT ATAGAAATCC ACTTATTATG TACATACTGG	240
CTTGTTTTTT TTCCCACTTC TCCAGTACAC TATTTCAAGC ACAGGCTCAA AATTTGAACC	300
CAAATGGTCT GTTAGGTCTC TTGACTTTT CAGTTCAAAG CTCTGCTAAT CTGCTAAACC	360
TAGCCCCAAA CCCACTCGAG	380

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCTAGA CCTGCCCCGA GCCCTGACCT AGTCCGGCGT GGAGAGAGGA ATGGAAAGCA	60
GTGTCCTTTT TGAGAAGGCA AATTACAGC TGGCTTTTGT AATCCTAGCT ATTTTGTGTT	120
TGTTTGCTAA GTCTTTGATA GTCCCCAGTG TGGTTTGTCT GCCAGTGATC TCAGCACCAC	180
CAGAGAGCTT GTTAGAAATG CGGCATCCCA ACCCCACCAC AGCCCTCCA AGTCAGATAC	240
TCCCCCTCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GAATTCGCTG TGGAGCTGGG CGTGCTGTTT GTCCGGCCCC GGCCCGGAAC CGGGCTGGGT	60
AGAGTGATGC GGACCCTCCT GCTGGTGCTG TGGCTGGCGA CGCGCGGAAG CGCGCTCTAC	120
TTTCACATCG GAGAGACGGA GAAGAAGTGC TTTATTGAGG AGATCCCGGA CGAGACCATG	180
GTCATAGGAA ACTACCGGAC GCAGCTGTAT GACAAGCAGC GGGAGGAGTA CCAGCCGGCC	240
ACCCCGGGGC TTGGCATGTT TGTGAGGTG AAGGACCCAG AGGACAAGGT CATCTGGCC	300
CGGCAGTATG GTTCCGAGGG CAGGTTCACT TTCANTTCCC ATACCCNTGT GTGAGCACCA	360
GATCTGTTTT CANTCCAATT CCACTCGAG	389

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GAATTCGGCC TTCATGGCCT AGAAGGAAAT AAAGGCCCGG ATTTCTGGAG TTCTGAGCCT	60
ACTTTTTTTT GGTGCATTTT GAAACATACG GATTTTACCG CTAGTATATT CAGTGAGGAA	120
GGAAGGCTTC TGAAGGATTG ATGATCCCCA AACTGGATTA TGTGTTATG ATAATGGTGT	180
ATTTGGTGCC CTAGCATAGT GAGGTGAGGT AGGTCTTTAA AATGGCTCAT TATAAACATC	240


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ATTGTTCTCTG AGCTCACTTG CCCTTGCATC TCCTGCCAGA GTGCTTTGTA CATAGTAGGC      300
CCTCATCAAT GCTTGTAGAT TTTAAATTCG GAGGCACACT TGAAGACAA TGGTGGCTGG      360
TAAATTAATT ATCAGGGTTA GCAACTTCAT TTCTGCTNAC GCTTAAAAAG TGCTGCGCGA      420
GGAAGCTCGA G                                     431

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(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GCCTCTGNTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCG ACCTTGGTTC      60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTCCAGAG GCCTTGCCTT TGGCTATGGG      120
CTGCTTTGTC TAGGAATGGC CTATATTTCC TCCCAGATGG GACCTGTGCT GCAGGCAGCA      180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGAATGTTC      240
TTTCCATGTG CTAACCCCTC TGGTGCTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC      300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC      360
TCTAATGGGT CCAGCTTCTC CCTGCCACC AATCTAACCG TTGCCACTGT GACCACACTT      420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT AAATTTTCAG GCAGTTTGAA GTATCTGGCA GAAAAAGTAA      60
ATTGAAATCA TTGGGACGTT GATTTTTAAA TTACCTAGAA GCAATCCCAA TGCTTTATGT      120
AATACTAAAA TTTCTCCTCT CTCTTTTCTT TATCTCTCTC TCCCCTGAAA ATAATCATTT      180
TTTTTCCAGT GCCAGTTCAG ATCTTGGCAA CAGTTGTTTT GAAAAAGTAC CTGAACAAAA      240
TACATTTTAT AAAGTAAAGT ATTCAGGAAC TGACAGAACT GGAGAAGAAT ATATTTATGT      300
TACAGAAGTC ATGGACAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GGCAAGTAAC AGGTTGCAAG AATTGGAGGC AGAGCAACAG CAGATCCAAG AAGAAAGAGA      60
ATTACTGTCC AGACAAAAGG AAGCTATGAA AGCAGAGGCA GGCCCAAGTT AACACAATT      120

```

ACTACAGGAG	ACAGACAAAT	TAATGAAGGA	AAAAC TAGAA	GTACAATGTC	AAGCTGAAAA	180
AGTACGTGAT	GACCTTCAAA	AACAAGTGAA	AGCTCTAGAA	ATAGATGTGG	AAGAACAAGT	240
CAGTAGGTTT	ATAGAGCTGG	AACAAGAAAA	AAATACTGAA	CTAATGGATT	TAAGACAGCA	300
AAACCAAGCA	TGGGAAAAGC	AGTTAGAAAA	AATGAGAAAA	TTTTTAGATG	AGCAAGCCAT	360
TGACAGAGAA	CATGAGAGAG	ATGTATTCCA	ACAGGAAATA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GAATTCGGCC	AAAGAGGCCT	AGTCGGTGCC	TCATTGGTAT	AAATGTTATG	TCTGCATGGG	60
TTTTTCTAC	AATTCTTTC	TAAGATTATT	TCTCCCAAA	GCTCAGCACT	TTTGAATTT	120
TTCATTCTCA	TCCAAAAATG	GAAGCAATTT	TATGTAAATG	TCTCTGGAA	GCAGTGTGG	180
AATTCATATT	TGGGTAGCA	GAAGCAGTAG	TTACAAGGGT	AGTGGTGTCT	TTTGTGGTGG	240
TGGTGGCACC	TGCTGCAGTT	GTTTCATTTT	GGGGTGCAGG	AGTAGGGAGG	GTAGGATCAG	300
TTGGAGAATT	TACAGGGAAA	AATGGAGGTC	CAGGTGGATA	GGGTCTAGAA	TTCAATC	357

(2) INFORMATION FOR SEQ ID NO:482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC	AAAGAGGCCT	AAGTGACTCC	AGAGCCTCCT	GCAAGATGCT	GTTGATTCTG	60
CTGTCACTGG	CCTTGCTGGC	CCTGAGCTCA	GCTCAGAACT	TAAATGAAGA	TGTCAGCCAG	120
GAAGAATCTC	CCTCCCTAAT	AGCAGGAAAT	CCACAAGGAG	CACCCCCACA	AGGAGGCAAC	180
AAACCTCAAG	GTCCCCATC	TCCTCCAGGA	AAGCCACAAG	GACCACCCCC	ACAAGGAGGC	240
AACCAGCCTC	AAGGTCCCC	ACCTCCTCCA	GGAAAACCAC	AAGGACCACC	CCCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

GAATTCGGCC	AAAGAGGCCT	AAGCAGACAC	AATGGTAAGA	ATGGTGCCTG	TCCTGCTGTC	60
TCTGCTGCTG	CTTCTGGGTC	CTGCTGTCCC	CCAGGAGAAC	CAAGATGGTC	GTTACTCTCT	120
GACCTATATC	TACACTGGGC	TGTCCAAGCA	TGTTGAAGAC	GTCCCGCGT	TTCAGGCCCT	180

TGGCTCACTC	AATGACCTCC	AGTTCTTTAG	ATACAACAGT	AAAGACAGGA	AGTCTCAGCC	240
CATGGGACTC	TGGAGACAGG	TGGAAGGAAT	GGAGGATTGG	AAGCAGGACA	GCCAAC'TCA	300
GAAGGCCAGG	GAGGACATCT	TTATGGAGAC	CCTGAAAGAC	ATCGTGGAGT	ATTACAACGA	360
CAGTAACGGG	TCTCACGTAT	TGCAGGGAAG	GTTTGGTTGT	GAGATCGAGA	ATAACAGAAG	420
CAGCGGAGCA	TTCTGGAAAT	ATTACTATGA	TSGAAAGGAC	AAACTCGAG		469

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GAATTCGGCC	AAAGAGGCCT	ACTACTTCTG	TAGTCTCATC	TTGAGTAAAA	GAGAACCCAG	60
CCAACTATGA	AGTTCCTTGT	CTTTGCCTTC	ATCTTGGCTC	TCATGGTTTC	CATGATTGGA	120
GCTGATTCAT	CTGAAGAGTA	TGGGTATGGC	CCTTATCAGC	CAGTTCCAGA	ACAACCACTA	180
TACCCACAAC	CATACCAACC	ACAATACCAA	CCTGCCTCAA	GGTCCTCCAC	CTCCTCCAGG	240
AAAGCCACAA	GGACCACCCC	CACAAGGAGG	CAACAAACCT	CAAGGTCCCC	CACCTCCAGG	300
AAAGCCACAA	CGACCACCCC	CACAAGGAGG	CAGCAAGTCC	CGAAGTTCTC	GATCTCCTCC	360
AGGAAAGCCA	CAAGGACCAC	CCCCACAAGG	AGGCAACAAA	CCTCAAGGTC	CCCCACCTCC	420
AGGAAAGCCA	CAAGGACCAC	CCCCACAAGG	AGGCAGCAAG	TCCCGAAGTG	CCCGATCTCC	480
TCCAGGAAAG	CCACAAGGAC	CATCCACAA	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

GAATTCGGCC	AAAGAGGCCT	ACTTCACTTC	AGCTTCACTG	ACTTCTTGAC	TCTCCTCTTG	60
AGTAAAGGA	CTCAGCCAAC	TATGAAGTTT	TTTGTCTTTG	CTTTAGTCTT	GGCTCTCATG	120
ATTTCCATGA	TTAGCGCTGA	TTCACATGAA	AAGAGACATC	ATGGGTATAG	AAGAAAATTC	180
CATGAAAAGC	ATCATTCACA	TCGAGAATTT	CCATTTTATG	GGGACTGTGG	ATCAAATTAT	240
CTATATGACA	ATTGATATCC	TTAGTAATCA	TGGGGCATGA	TTATAGAGGT	TTGACTGGCA	300
AATTCACTTT	TACTCATTTA	TTCTCATTCA	TCACACCGCA	AGTCTAGGCC	TCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GGTTACCATC CTCAAAGGAT TGGCTAAAAG CAAGCAACTG GATTGAACAC CCTAAGAAGA      60
AAGATTCACA CTGCACCAGG AGACATCAGA AAGAATGAAA ACTCTGCCGC TGTTGTGTG      120
CATCTGTGCA CTGAGTGCTT GCTTCTCGTT CAGTGAAGGT CGAGAAAGGG ATCATGAACT      180
ACGTCACAGG AAGGCATCAT CACCAATCAC CCAAATCTCA CTTTGAATTA CCACATTATC      240
CTGGACTGCT AGCTCACCAG AAGCCGTTCA TTAGAAAAGTC CTATAAATGT CTGCACAAAC      300
GCTGTTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCC AATTCCTCAC      360
CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT AGTGGCTACA      420
ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC CCTTCCAAAT      480
GTGACTTTTC TTCCCAGAA TGCCACCACC ATATCTTCAA GAGAAAATGT TAACACAAGC      540
TCTTCTGTAG CTACATTAGC ACCCAGTGAA TTCCCCAGCT CCACAAGACA CCACAGCTGC      600
CCCACCCACA CCTTCTGCAA CTACACCAGC TCCACCCCTC GAG                        643

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GAATTCGGCC AAAGAGGCCT ACAAGATGCT GCTGGTCCTG CTCTCAGTGG TCCTTCTGGC      60
TCTGAGCTCA GCTCAGAGCA CAGATAATGA TGTGAACAT GAAGACTTTA CTTTCACCAT      120
ACCAGATGTA GAGGACTCAA GTCAGAGACC AGATCAGGGA CCCCAGAGAC CTCCTCCTGA      180
AGGACTCCTA CCTAGACCCC CTGGTGATAG TGGTAACCAA GATGATGGTC CTCAGCAGAG      240
ACCACCAAAA CCAGGAGGCC ATCACCGCCA TCTCCCCCA CCTCCTTTTC AAAATCAGCA      300
ACGACCACCC CAACGAGGAC ACCGTTTCATC TCGAG                        335

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC AAAGAGGCCT AGACACATTG CCTTCTGTTT TCTCCAGCAT GCGCTTGCTC      60
CAGCTCCTGT TCAGGGCCAG CCCTGCCACC CTGCTCCTGG TTCTCTGCCT GCAGTTGGGG      120
GCCAACAAAG CTCAGGACAA CACTCGGAAG ATCATAATAA AGAATTTTGA CATTCCCAAG      180
TCAGTACGTC CAAATGACGA AGTCACTGCA GTGCTTGCAG TTCAAACAGA ATTGAAAGAA      240
TGCATGGTGG TTAAACTTA CCTCATTAGC AGCATCCCTT CTACAAGGTG CATTAACTA      300
TAAGTATAAC TGCCAACCTC GAG                        323

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

GAATTCGGCC AAAGAGGCCT AGTGACACCA GAGCCTCCTG CAAGATGCTT CTGATTCTGC	60
TGTCAGTGGC CCTGCTGGCC TTCAGCTCAG CTCAGGATTT AAATGAAGAT GTCAGCCAGG	120
AAGATGTT	128

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

GAATTCGGCC AAAGAGGCCT AATTTTGACC AGCAGATTAA TCAACTGTAA GACGGATCCT	60
CACACAAAGA GGCAACTGAA AGGATGAAAT CACTGACTTG GATCTTGGGC CTTTGGGCTC	120
TTGCAGCGTG TTTACACCT GGTGAGAGTC AAAGAGGCCC CAGGGGACCA TATCCACCTG	180
GACCGCTGGC TCCTCCTCAA CCTTTTGGCC CAGGATTTGT TCCACCACCT CCTCCTCCAC	240
CCTATGGTCC AGGGAGAATC CCACCTCCTC CTCTGCAGAG AAAACCTTG AAGAAAAGCA	300
GGAACAGAGA TCGATGGCGA TCTATTTCCC TGTACTATAC TGGAGAGAAA GGTCAAAATC	360
GTCGAG	366

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GGTTTCCCGT TTGTCCCTCC TTCAAGGTTT TTTTCAGCAG CTGCAGCACC CGCTGCCCCA	60
CCTATTGCAG CTGAGCCTGC TGCAGCTGCA CCTCTTACAG CCACACCTGT AGCAGCTGAG	120
CCTGCTGCAG GGGCCCTGT TGCAGCTGAG CCTCCTGCAG AGGCACCTGT TGGAGCTGAG	180
CCTGCTGCAG AGGCACCTGT TGCAGCTGAG CCTGCTGCAG AGGCACCTGT TGGAGTGGAG	240
CCAGCTGCAG AGGAACCTTC ACCAGCTGAG CCTGCTACAG CCAAGCCTAG GCCTCT	296

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

CTCGAGTCCT TGTGGCTTTC CTGGAGGTGG GGGACCTTGA GGTTTGTTGC CTCCTTGTGG	60
GGGTGGTCCT TGTGGCTTTC CTGGAGGAGG TGAAGGACCT TGAGGCTGGT TGCCTCCTTG	120

TGGGGGTGGT CCTTGTGGCT TTCCTGGAGG AGATCGGGGA CTTCGGGGAC TTGTCTCCTT	180
GTGGGGGTGG TCCTTGTGGC TTTCCTGGAG GTGGGGGACC TTGAGGTTTG TTGCCTCCTT	240
GTGGGGGTGG TCCTTGTGGC TTTCCTGGAG GAGGTGGGGG ACCTTGAGGC TGGTTGCCTC	300
CTGTGTGGGG TGGTCCTTGT GGCTTTCCTG GAGGAGATGG GGGACCTTGA GGTTTGTTGC	360
CTCCTTGTGG GGGTGCTCCT TGTGGATTTC CTGCTATTAG GGAGGGAGAT TCTTCTCGGC	420
TGACATCTTC ATTTAAGTTC TGAGCTGAGC TCAGGGCCAG CAGGGCCACT GACAGCAGAA	480
TCAACAGCAT CTTCAGGAG GCTCTGGAGT CACTTAGGCC TCTTTGGCCG AATTC	535

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTCGGCC AAAGAGGCCT AGTCGGTAAT CACAACAAAC ACGGAGCAAT CTCAATGCTG	60
TTTATCCGGA GGACAGTCTG CGGGGTCTGT ACGATTCTTT TCTTCTTGAA GTTTTTCCTT	120
TTCCTGAATC TCATAATGAT TCTTGGCCAT GATTCTGTCT TTTCAATGAC TGTGGCTTCT	180
ACTCGAACAA GATCCTTTCC GAGGAGTGGC TTGCCAAGCA GCGTGAAGTT GTCTGCCCCA	240
ACCAGCAGGA CCTTCTCCAG TCGAATTCTC TCTCCACACG CAAGGTCTAG TTCATTTC	300
ATTAAGATCA GTTCTTCAGA G	321

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GAATTCGGCC AAAGAGGCCT AACCTGCCTT GGTCTTGCT CCTCTTTCCA CGTTGGATAA	60
CAATTTTTTG GTTGTTTTGT TTAAGTTGGT GCTCTGAAGC TTAATCTCAG TACCCTTTAC	120
TCTGAATTGT CAAATTTTGA TAAAACGTGC CATTTTCTTT GGTAAGAGAA AGCAGGTCTT	180
AATGTCTGCC AGAACACAAT TTATATGCCT TATTGGCTTC ATTAACTTT TAGAAAACCT	240
TAGCATTGT TACTTTTTTC CATTGCATT ACTTTCAAAT GCACCTAATG AATTCGTCAC	300
CCAGTCGCAA CTTTCCCTT CTCTGTCCA TTGCTTTCTC CTTTCCCAA CGCAGCTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC AAAGAGGCCT AAAGCGACCA AGATAAAAGT GGACAGAAGA ATAAGCGAGA      60
CTTTTATCC ATGAAACAGT CTCCTGCCCT CGCTCCGGAA GAGCGCTACC GCAAAGCCGG      120
GTCCCCAAG CCGGTCTTGA GAGCTGATGA CAATAACATG GGCAATGGCT GCTCTCAGAA      180
GCTGGCGACT GCTAACCTCC TCCGGTTCCT ATTGCTGGTC CTGATTCCAT GTATCTGTGC      240
TCTCGTTCTC TTGCTGGTGA TCCTGCTTTC CTATGTTGGA ACATTACAAA AGGTCTATTT      300
TAAATCAAAT GGGAGTGAAC CTTGGTCAC TGATGGTGAA ATCCAAGGGT CCGATGTTAT      360
TCTTACAAAT ACAATTTATA ACCAGAGCAC TGTGGTGTCT ACTGCACATC CCGACCAACT      420
AGGCCTCTTT GGCCG                                     435

```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC AAAGAGGCCT AGAAATATAT TTTCTAGTGA ATTCTTATTG GAAGCCAGGT      60
CTCTCCTCTC ATTAGATCAA AAGGGACTTA TGTACATACA ACAATTGAAA GTGTTACTCG      120
AG                                     122

```

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC AAAGAGGCCT AAGAAAATCA GCCTGTCTGC TCTCTCCTTG GCTCAACAAG      60
GCCTCTAACA GTCTTCTGTC CTCTATTCTG CACACGGCAT ATTTGGGAAC GAGAAACAAA      120
AGTTTCCCA AATGAAGAGA ACTCACTTGT TTATTGTGGG GATTATTTT CTGTCCTCTT      180
GCAGGGCAGA AGAGGGGCTT AATTCCCCA CATATGATGG GAAGGACCGA GTGGTAAGTC      240
TTTCCGAGAA GACCCTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 48 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAAAGAGGCC TACCAACATG CCAGAGGCCG TACCCATATC CGCAGCAG      48

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```
GAATTCGGCC TTCATGGCCT ACCCTGTCAA AATTTGCGCT CCTCTTGATT TTCAATATAT      60
ATATATTTTT TTGTCTTACT CTGTTGCCCA GGCTAGAGTG CAGTGACGTG ACCTTGGCTC      120
ACTGCAACCT CTGCCTCCTG GGCTCAAGCA ATCCTCCCAC CTCAGCCTCC TCAGTAGCTG      180
GGACCAAGG CATATGCTAC AAAGCCAGA TTATTTTTT ATAGAAACAG GGTTCACCA      240
TGTTGCCAG GCTTGCTCG AACCCAGAA CTCGAG      276
```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```
GAATTCGGCC TTCATGGCCT ACAAATGCCC ATCAAAGACT GGATAAAGAA AATGTAGTAT      60
ATATATATAT ACCATGGAAT ACTGTGCAGC CATAAAAAAG GAATGAGATC ATGTGTTTCA      120
CAGGGATGTG GATGAAGCTG GAAGCCATCA TCCCCAGCAG ACTAACACAG GAACAGAAAA      180
CCAAACACTG CATGTTCTCA CTCATAAGTG GGAGCTGAAC AATGAGAACA GGTGGGCACA      240
GGGACGGGAA CAACACACAC CAGGGCCTGT TGTGTGGTGG GGGTGAGGGT TGGAACTCGA      300
G      301
```

(2) INFORMATION FOR SEQ ID NO:501:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```
GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180
CTTGTCCCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA      240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC      300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTTGTG      360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG      400
```

(2) INFORMATION FOR SEQ ID NO:502:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAGATAAACA AAATTGATTG CCCCATTCTC TCACITCCCC ATCTTGTCCTT CCTAGACCCC	60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCAGAAC ACTTGATATAT TGTTTGGTTG	120
AGGTTCTGTC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA	180
TATTCAGTGT AAATTTTATT TAATCTGTTT TTTTGTGTTG TTGGGGGTTA TTTGGGGGGA	240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GGCCTCACCT TACCCAGGA CTCCGCTATG ACACCGCCTC TGCCCTACA AGACACAGAT	60
CTCTCGTCAG CCTCAAAGCC TGTGGCTGCA GCCACGCCTG TGTCCTAGCA GGCTGAAGAG	120
GGCCTCACCT TACCCAGGA CTCCGCTATG ACAGCACCTC TGCTCTGCA AGACACAGGC	180
CCCACCTCAG GTCCAGAGCC TCTGGCTGTG GCCACCCCTC AAACCTTGCA GGCAGAAGCA	240
GGCTGTGCCC CAGGGACAGA GCCTGTGGCC ATACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC	60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT	120
GTCTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC	180
CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```

GAATTCGGCC TTCATGGCCT AAGGAGAATG GCGTGCACCC GGGAGGCGGA GCTTGCAGTG      60
AGCCAACATC ACGCCACTGC ACTCCAGCCC GGGCGACTGA GCGAGACTCT CTCTCNAAAA      120
AAAAAAAAAA AAAGAAAAAG AAAAAGAAAA AGAAAAAGAA AAGAAAAATAT ATANATACAC      180
ACAGAGAGTG AGAGAGAGAG AGAGAGAGAG ACCAGAAAAA GAGAGAAGGA GAAAGAGAGA      240
ATGCAAAAAC CAAGAGGANA GAATGATCCA CTCTCCTAACT AGAAAGGTAG CTCTCAATCT      300
GAAAAGTCAC TTGATTACTT TGTCTATTTT GCTTATCTGC TACATCAATG GTTCCCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```

GAATTCGGCC TTCATGGCCT AGGCCTTTTC TTTTAAAGG AATTCAAGCA GGATACGTTT      60
TTCTGTTGGG CATTGACTAG ATTGTTTGCA AAAGTTTCGC ATCAAAAACA ACAACAACAA      120
AAAACCAAAC AACTCTCCTT GATCTATACT TTGAGAATTG TTGATTTCTT TTTTATTATC      180
TGACTTTTAA AAACAACCTT TTTTCCACT TTTTAAAAA ATGCACTACT GTGTGCTGAG      240
CGCTTTTCTG ATCCTGCATC TGGTCACGGT CGGCTCAGC CTGTCTACCC GCAGCACACT      300
CGAG

```

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GGGGCTGCGG GGATTGACCT CCTCACTTCT GGGTTGCCAC TCGAAGCTTG CTCGGGGCAA      60
CGACCCTGCT GCTTCCCAGA GGGAACTGT AGCCACAGA CCAGGAGAGA AGCCAAAGCA      120
CCTGCTCCAC GTCCACATCA CCCAGGCTT CTAGCCCCCA GGGGCTTCAT CAGTGCTTCA      180
GCGCTCTCTC CCATCCCCCA CTCCCATGT CCTCGTGAT CCGAACTCCT AGGGCTCCGT      240
GTCCACAGG TCACCACTTC CGGCTGTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC	TTCATGGCCT	ACATCAATAA	AATACATTCT	ACACAGAATA	CGCCAACCAT	60
ACACTACTCT	TTTTTGATAA	TAAAAAATGT	ATTACTGAG	CCAGTTGTGG	TGGCTCGCGC	120
CTATAATCCC	AGCACCTTGG	AAGGCCAATG	GGAGTGGATC	GGTTGAGGCC	AGGAGTTTGA	180
GACCGGCCTG	GCCAACATGG	TGGAATGCCG	TCTCTACTGA	GAATGCAGAA	ATGAGCCGGG	240
CACGGTGGCA	CGCACCTGTA	GTCCCAGGTA	CTCCGATTCC	TCTCGAG		287

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

AAGAGGCGAT	GGCGGCGATG	GCATCTCTCG	GCGCCCTGGC	GCTGCTCCTG	CTGTCCAGCC	60
TCTCCCCTG	CTCAGCCGAG	GCCTGCCTGG	AGCCCCAGAT	CACCCCTTCC	TACTACACCA	120
CTTCTGACGC	TGTCATTTC	ACTGAGACCG	TCTTCATTGT	GGAGATCTCC	CTGACATGCA	180
AGAACAGGGT	CCAGAACATG	GCTCTCTATG	CTGACGTCGG	TGGAAAACAA	TTCCCTTGTC	240
CACTCGAG						248

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GGCGATGATT	AGGCCAGACC	CTCCCCATCC	TCGTGAGGGC	CAGAAGCTGT	TGCTACACTG	60
TGAGGGTCGC	GGCAATCCAG	TCCCCAGCA	GTACCTATGG	GAGAAGGAGG	GCAGTGTGCC	120
ACCCCTGAAG	ATGACCCAGG	AGAGTGCCCT	GATCTTCCCT	TTCCTCAACA	AGAGTGACAG	180
TGGCACCTAC	GGCTGCACAG	CCACCAGCAA	CATGGGCAGC	TACAAGGCCT	ACTACACCCT	240
CAATGTTAAT	GACCCAGTC	CGGTGCCCTC	CTCCTCCAGC	ACCTACCACG	CCATCATCGG	300
TGGGATCGTG	GCTTTCATTG	TCTTCTGCT	GCTCATCATG	CTCATCTTCC	TCGGCCACTA	360
CTTGATCCGG	CACAAAGGAA	CCTACCCTAC	ACTCGAG			397

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```

GCCTGCCTCC AGGCCTTTGC TCCCACTGTT GCCTCCACTT AGAATAACAT TCCACCCCAT      60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCTTA AGGCCAGTTC TAACCCTAAC      120
TGACAACAAA TCATCTCTAC ATGATCTTTT CTTTCTGGGA ATGCCTGCAG CACTGTTTAA      180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA      240
TGCTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT      60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTTGTTCCGG TTTTCCACAG CGGTGGTGAC      120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG      180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA      240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAACTTCT      300
CGAG      304

```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGGAACCTGG ACCGCGGCGG CGCCGGGTTT CCCTCATGAT      60
CCCGGGCGGG CGGCGGCGGC GGCAGAGGCG GCGGGAGGAT GACCTCTTAC CGGGAGCGGA      120
GTGCCGACCT GGCCCGTTTC TACACTGTCA CCGAGCCCCA GCGACACCCG AGGGGCTACA      180
CAGTATATAA GGTCAACGCC CGGGTTGTTT CACGAAGAAA TCCAGAGGAT GTCCAGGAGG      240
GAGAATCCTG AACCAACCTA TCCATGAACA TACTCTCTGC CATTTTCTTA GTCCTTTTTT      300
CGGAAAAACT CGAG      314

```

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT ACGAACTTAA GAAAATGAGA CTGAGCAATC TCATGGTTCT      60
TGGACAGTTA GTCTATGGCC AATTGATGGA ACCAGTAAAT CGAGAGAACT TTACGCAGAC      120
CTTGCCCCAA ATGCCAATTC ATTCTCATGC ACAGCCCCCA GATGCCAGGG AAGAGGATAT      180

```

CATACTTGAA GGTCAACAGA GCCTGCCATC CCAGGCTTCA GATTGGAGCC GATACTCAAG	240
CAGCTTACTG GAATCCGTCT CTGTTCTGG AACACTAAAT GAGGCTGTTG TAATGACTCC	300
ATTTTCATCG GAACCTCAAG GAATTCAGA ACAGACCCTC CTGGAGCTGT CCAAAGGAAA	360
GCCCTCCCCG CATCCCAGAG CCTGGTTTGT GTCTCTTGAT GGAAAGCCAG TTGCACAAGT	420
GAGGCACTCC TTTATAGACC TGA AAAAGG CAAGAGAACC CAGAGCAATG ACACCACTCT	480
GGACTCTGGG GTGACATGA ATGAGCTTCA CTCAAGTAGA AAGCTCGAG	529

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GGAGATGAAA GTTAAAAGTG AAAACCTTAA AGAGGAGCCT CAGTCTTCTG AAGAAGAATC	60
TATGCTTCT GTGGAACCA GGACACTAAT AAAATCTGAG CCTGTAAGTC CAAAGAATGG	120
TGTTTTACCA CAGGCTACTG GAGACCAGAA ATCTGGTGA AAATGTGAAA CAGACAGACG	180
CATGGTTGCA GCCAGAACAG AACCCTAAC TCCAAACCCA GCTTCTAAGA AACCAAGAGT	240
CCACAAAAGG GGATCAGAAT CTAGTCTGA TTCTGACTCA GATTCTGAGA GATCATCTTG	300
TTCTCCAGA TCATCTCTT CCTCATCATC CTCTTCTGT CCCACTCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

GTCTACACCN TTCCGAGTTG GCTGCAGATT TGTGGTGCCT TCTGAGCCGT CTGTCCTGCG	60
CCAAGATGCT TCAAAGTATT ATTAAAAACA TATGGATCCC CATGAAGCCC TACTACACCA	120
AAGTTTACCA GGAGATTGG ATAGGAATGG GGCTGATGGG CTTATCGTT TATAAAATCC	180
GGGCTGCTGA TAAAAGAAGT AAGGCTTTGA AAGCTTCAGC GCCTGCTCCT GGTCACTACT	240
AACCAAGATT ACTTGAGTA CATGTGAAAG AAAACGTCAG TCTGCCTGTA AATTCAGCA	300
AGCCGTGTTA GATGGGGAGC GTGGAACGTC ACTGTACACT TGTATAAGTA CCGTTACTT	360
CATGGCATGA ATAAATGGAT CTGTGAGATG CACTGCTACC TGGTACTGCT TTCAGTGTGT	420
TCCCCCTCAG CCCCTCCGGC GTGTCAGGCA TACTCTGAGT AGATAATTG TCATGCAGCG	480
CATGCAATCA GAATCTCGAG	500

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

GAATTCGGCC	TTCATGGCCT	AGATGCTCAA	CACCTCCTCC	TTGGTGGAGC	AGCTGAACGA	60
GCAGTTTAAC	TGGGTGTCCC	GGCTGGCAAA	CCTCACGCAA	GGCGAACACC	AGTACTATCT	120
GCGGGTCACC	ACGGTGGCTT	CCCACACTTC	TGACTCGGAC	GTTCCTTCCG	GTGTCACTGA	180
GGTGGTCGTG	AAGCTCTTTG	ACTCTGATCC	CATCACTGTG	ACCGTCCCTG	TAGAAGTCTC	240
CAGGAAGAAC	CCTAAATTTA	TGGAGACCGT	GGCGGAGAAA	GCNCTGCAGG	AATACCGCAA	300
AAAGCACCGG	GAGGAGTGAG	ATGTGGATGT	TGCTTTTGCA	CCTACGGGGG	CATCTGAGTC	360
CAGTCCCCC	CAAGATGAGC	TGCAGCCCCC	CAGAGAGAGC	TCTGCACGTC	ACCAAGTAAC	420
TCTCGAG						427

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

GAATTCGGCC	TTCATGGCCT	AATCTTAAGG	GACCTTTCCT	TACTACAGAT	TCAAATGCGA	60
GATCTTGAGG	GTTACAGGGA	AACGAGGTAT	CAGTTACTTC	AGCTTCGACC	TGCGCAGAGA	120
GCATCATGGA	TTGGTTATGC	TATTGCTTAC	CATTATTAG	AAGATTATGA	AATGGCAGCA	180
AAGATTTTAG	AAGAATTTAG	GAAACACAA	CAGACATCCC	CTGACAAGGT	GGATTATGAA	240
TATAGTGAAC	TACTCTTATA	TCAGAATCAA	GTTCTTCGGG	AAGCAGGTCT	CTATAGAGAA	300
GCTTTGGAAC	ATCTTTGTAC	CTATGAAAAG	CAGATTTGTG	ATAAACTTGC	TGTAGAAGAA	360
ACCAAAGGGG	AACTTCTGTT	GCAACTATGT	CGTTTGGA			399

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC	TTCATGGCCT	ACTTATCTTA	ATCCAATGGG	TGACATCTTC	AACAACCCTG	60
TTCCAAATAA	GGCTGCATTC	TAAACACTAG	GGATTAAGAC	ATCAACATGT	GAATTTTGGA	120
GGAAATGTAGT	TCTAACCATA	ACAGCAGTGA	ATGAGATGAC	AGACTATTGC	TCTCAAAAGA	180
TAGCCAGGTT	TCTAGTTTCC	TTAGGCATTT	TCTGGAGGTT	TGCGAGCAGT	TCATTATTAT	240
CTTAAAAATA	TTATCCAGAG	CTGTGGTCTA	TCAGCAGCTC	ATTACCAGAC	TGGCAGATAC	300
ATTTAATCAG	CAAAAGAGTT	GTTCTGTGA	TTAGCATCCT	CCTGGTTTCC	CAGCTCAAGA	360
GTTCTTCTGA	GTAATAGTAA	TCCTTCCCCC	ATGCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GCTGAAGTGG TGA CTTTGA GAGAGGACAC AAAATTATCA TCAGCTCCAG TCGGAGAATC      60
CAGAAAGGAG AAGAGGTAAG AGTGTGAGAG ATTGCATCTG CCATGTTGTT CAGATCCTGG      120
GCGAATAGTT CCCTCCTCAC ACAGGTCACT TACTCACTTG TTTCCCAATT CTTTGTGTG      180
ATAAAAACTC TGTCCATAAT AGGCCAGATG TTCCCACCCT GCAGTATCTC ACCCTTCAGG      240
CACTCCAGTT CACCTTCCTC CACATCCCTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GCTTTAAGAA TTAACGAAAG CAGTGTCAAG ACAGTAAGGA TTCAAACCAT TTGCCAAAAA      60
TGAGTCTAAG TGCATTTACT CTCTTCTGG CATTGATTGG TGGTACCAGT GGCCACTACT      120
ATGATTATGA TTTTCCCCTA TCAATTTATG GGCAATCATC ACCAAACTGT GCACCAGAAT      180
GTAAGTCCCC TGAAAGCTAC CCAAGTSCCA TGTACTGTGA TGAGCTGAAA TTGAAAAGTG      240
TACCAATGGT GCCTCCTGGA ATCAAGTATC TTTACCTTAG GAATAACCAG ATTGACCATA      300
TTGATGAAAA GGCCGCACTC GAG                                     323

```

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

```

GGAAAAAGAA GAGAAAGCCA AGGAAGACAA GGGCAAACAA AAGTTGAGGC AGCTTCACAC      60
ACACAGATAC GGAGAACCAG AAGTGCCAGA GTCAGCATTC TGGAAGAAAA TCATAGCATA      120
TCAACAGAAA CTTCTAAACT ATTTTGCTCG CAACTTTTAC AACATGAGAA TGTTAGCCTT      180
ATTGTGCGCA TTTGCTATCA ATTTCATCTT GCTCTTTTAT AAGGTCTCCA CTTCTTCTGT      240
GGTTGAAGGA AAGGAGCTCC CCACGAGGCT CGAG                                     274

```

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

```

GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT      60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGGCAGAAGG TGACCAGCCT AACGGCCTGC      120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC      180

```

CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCAGC TGCTCTTTGG CACTGTGGGG 240
GTGCCTGAGC ACACATACCG CTCCTCCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

GAATTCGGCC TTCATGGCCT ACTCTCCTAT AAAGCAGACG CCGCGCCGCG CTGCGACGCT 60
GTAGTGGCTT CGTCTTCGGT TTTTCTCTTC CTTGCGTAAC GCCTCCCGGC TCTCGTCAGC 120
CTCCCGCCCG CCGTCTCCTT AACACCGAAC ACCATGCCTT CAATTAAGTT GCAGAGTTCT 180
GATGGAGAGA TATTTGAAGT TGATGTGGAA ATTGCCAAAC AATCTGTGAC TATTAAGACC 240
ATGTTGGAAG ATTTGGGAAT GGATGATGAA GGAGATGATG ACCCAGTTCC TATACCAAAT 300
GTGAATGCAG CAATATTAAA AAAGGTCATT CAGTGGTGCA CCCACCACAA GGATGACCCT 360
CCTCCTCCTG AAGATGATGA GAACAAAGAA AAGCGAACAG ATGATATCCC TGTGTTGGAC 420
CAAGAATTCC TGAAAGTTGA CTAAGGAACA CTCGAG 456

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC TTCATGGCCT AATGGGACAA CTCCTCGCCC TCTACCTGTC CCCTCCCCCT 60
TTGGTTGTAT GATTTTCTTC TTTTTAAGA ACCCCTGGAA GCAGCGCCTC CTTCAGGGTT 120
GGCTGGGAGC TCGGCCCATC CACCTCTTGG GGTACCTGCC TCTCTCTCTC CTGTGGTGTG 180
CCTTCCTCT CCCATGTGCT CGGTGTTGAG TGGTGTATAT TTCTTCTCCC AGACATGGGG 240
CACACGCCCC AAGGGACATG ATCCTCTCCT TAGTCTTAGC TCATGGGGCT CTTTATAAGG 300
AGTTGGGGGG TAGAGGCAGG AAATGGGAAC CGAGCTGAAG CAGAGGCTGA GTTAGGGGGC 360
TAGAGGACAG TGCTCCTGGC CACCCAGCCT CTGCTGAGAA CCATTCCTGG GATTAGAGCT 420
GCCTTTCCCA GGGAAAAAGT GTCCGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GCGATTGAAT TCTAGACCAG ACTCGTCTCA GGCCAGTTGC AGCCTTCTCA GCCAAACGCC 60
GACCAAGGAA AACTCACTAC CATGAGAATT GCAGTGATTT GCTTTTGCCT CCTAGGCATC 120

ACCTGTGCCA TACCAGTTAA ACAGGCTGAT TCTGGAAGTT CTGAGGAAAA GCAGCTTTAC	180
AACAAATACC CAGATGCTGT GGCCACATGG CTAAACCCTG ACCCATCTCA GAAGCAGAAT	240
CTCCTAGCCC CACAGACCCT TCCAAGTAAG TCCAACGAAA GCCATGACCA CATGGATGAT	300
ATGGATGATG AAGATGATGA TGACCATGTG GACAGCCAGG ACTCCATTGA CTCGAATCGA	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT	60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGGCAGAAGG TGACCAGCCT AACGGCCTGC	120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC	180
CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCAGC TGCTCTTTGG CACTGTGGGG	240
GTGCCTGAGC ACACATACCG CTCCGSAACC AACTTCACCA GCAAATACAA CATGAAGGTC	300
CTCTACTTAT CCGCCTTCAC TAGCAAGGAC GAGGGCACCT ACACGTGTGC ACTCCACCAC	360
TCTGGCCATT CCCCACCCAT CTCCTCCCAG AACGTTACAG TGCTCGAG	408

(2) INFORMATION FOR SEQ ID NO:528:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

GTAGGTCACA GCAGAAGCAG CCAAAATGGA TCCCCAGTGC ACTATGGGAC TGAGTAACAT	60
TCTCTTTGTG ATGGCCTTCC TGCTCTCTGG TGCTGCTCCT CTGAAGATTG AAGCTTATTT	120
CAATGAGACT GCAGACCTGC CATGCCAATT TGCAAACTCT CAAAACCAAA GCCTGAGTGA	180
GCTAGTAGTA TTTTGGCAGG ACCAGGAAAA CTTGGTCTG AATGAGGTAT ACTTAGGCAA	240
AGAGAAATTT GACAGTGTTT ATTCCAAGTA TATGGGCCG ACAAGTTTTG ATTCGGACAG	300
TTGGACCCTG AGACTTCACA ATCTTCAGAT CAAGGACAAG GGCTTGATC AATGTATCAT	360
CCATCACAAA AAGCCACAG GAATGATTCG CATCCACCTC GAG	403

(2) INFORMATION FOR SEQ ID NO:529:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

GAATTCCTCT TCTTTACCCT CGTCTGCCG GGCACCTTCC TTAGGTTTGG TTTCATCTAC	60
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```

AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT 120
TGCCTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC 180
AGGCACATCG GCTTGTTTAG GTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG 240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CCTTCTCCTC 300
TGAGGATGCA GGAGCCTGGG GGGCTACCTG CTCTGTGGCA GCATCACCCCT CCCCCITTTT 360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG 420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTCTTCTCC ACCCATCGC TCGAG 475

```

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GTGCTGGCGG ACATGGACGT GGTGAATCAG CTGGTGGCTG GGGGTCAGTT CCGGGTGGTC 60
AAGGAGCCCC TCGGCTTTGT GAAGGTGCTG CAATGGGTCT TCGCCATCTT CGCCTTTGCC 120
ACATGCGGCA GCTACAGTGG GGAGCTCCAG CTGAGCGTGG ATTGTGCCAA CAAGACCGAG 180
AGTGACCTCA GCATCGAGGT CGAGTTCGAG TACCCCTTCA GGCTGCACCA AGTGTACTTT 240
GATGCACCCA CCTGCCGAGG GGGCACCACC AAGGTCTTCT TAGTTGGGGA CTACTCTCTG 300
TCAGCCGAAT TCTTTGTCAC CGTGGCCGTG TTTGCCTTCC TCTACTCCAT GGGGGCTCTG 360
GCCACCTACA TCTTCTGCA GAACAAGTAC CGAGAGAATA ACAAAGGGCC CATGCTGGAC 420
TTTCTGGCCA CGGCTGTGTT CGCCTTCATG TGGCTAGTTA GCTCATCGGC ATGGGCCAAG 480
GGGCTGTCAG ATGTGAAGAT GGCCACAGAC CCAGATGAAC TCGAG 525

```

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```

GCAAACAGAC AAGGCTTACA GGTTAGTTCA GGATCTGCGC CTTATCAAGC AAATTGTTTT 60
GCCTATCCAA CTGCGGTGTC CAAACCCATA TACTCTCCTA TCCTCAATAC CTCCTCCAC 120
AACCCCTCCA TAACCCATTA TTCGGTCTG GATCTCAAAC ATGCTTTCTT TGCTATTCCT 180
TTGCATCCTT CATCCCAGCC TCTCTTGGT TTCACTTGGG CTGGCCCTGA CACCCATCAG 240
CCTCAGCAAC TTACCTGGGC TGTACTGCCA CAAGCCTTCA CGGACAGCCC CCATTACTTC 300
AGTAGCCCTC GAG 313

```

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAGACTATCG CCTATACTTT ATTTGGGTAA ATGTTTGGT TAAGGTTGTT TGGTGGTAGC      60
TGGTTGGGTT GCTGGGGCTC GGTGTTGTA GTCGCGATGT TCTTCTCCGA GGCCAGAGCC      120
AGGTCGCGGA CGTGGGAAGC CAGTCCCTCG GAACACAGGA AGTGGGTGGA AGTATTTAAA      180
GCATGTGATG AAGATCACAA AGGATATCTC AGCAGAGAGG ACTTTAAAC TGCTGTTGTA      240
ATGCTGTTTG GGTACAAGCC CTCCAAGATA GAAGTGGATT CTGTGATGTC TTCAATAAAT      300
CCAAATACTT CTGGTATATT ACTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GCCTGCCCC ACCTTACAGG TCTGGGATGT ACCTTTCCAT CTGTTGCTGC TTTCTTCTAT      60
GGGCCCCTGC CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCGGAGGAG CAAGGGGGCCG      120
GCACGGTGAT CGGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCCTGCAG      180
AGCGCGGCGG CGGAGGGGCG AGCAAGTCGG GTAGCTACCG GGTGCTGGAG AACTCCGCAC      240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC      300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG                                     347

```

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GGTAGGACCG GCGAGGAATA GGAATCATGG CGGCTGCGCT GTTCGTGCTC CTGGGATTCC      60
CGCTGCTGGG CACCCACGGA GCCTCCGGGG CTGCCGCGAC ATTCTTCACT ACCGTAGAAG      120
ACCTTGGCTC CAAGATACTC CTCACCTGCT CCTTGAATGA CAGCGCCACA GAGGTCACAG      180
GGCACCGCTG GCTGAAGGGG GCGGTGGTGC TGAAGGAGGA CGCGCTGCCC GGCCAGAAAA      240
CGGAGTTCAA GGTGGACTCC GACGACCACT GGGGAGAGTA CTCCTGCGTC TTCCTCCCCG      300
AGCCCCATGG CACGGCCAAC ATCCAGCTCC ACGGGCCTCC CAGAGTGAAG GCTGTGAAGT      360
CGTCAGAAC AATCNACGAG GGGGAGACGG CCATGCTGGT CTGCAAGTCA GAGTCCGTGC      420
CACCTGTAC TGACTGGGCC TGGTACAAGA TCACTGACTC TGAGGACAAG GCCCTCATGA      480
ACGGCTCCGA GAGCAGAGTT CTCGAG                                     506

```

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

GAATTCCTCT	TCTTTACCT	CGTCCTGCCG	GGCACTTTCC	TTAGSTTTGG	TTTCATCTAC	60
AGCTTCTATG	TTCTCTTCAG	CTTGGCTGCT	CTCCCCAGTC	TCCGTTGGAG	GCTGGGCTGT	120
TGCCTTGGCA	GCAGCATCCT	CTGCGGCAGG	GGTGGTGGCA	GCAGCAGCAG	TGACAGCAGC	180
AGGCACATCG	GCTTGTTTAG	GCTCCTCCTT	GGCTGGGGCA	TCTTCAGCCT	TGGAGGACGG	240
CGAGTTATCA	GTGGAAGCTT	TAGTGGCACT	TTCTGTCTCA	GCTGAGCCGG	CCTTCTCCTC	300
TGAGGATGCA	GGAGCCTGGG	GGCTGCCTG	CTCTGTGGCA	GCATCACCTT	CCCCCTTCTT	360
CTCCTCGGAA	GGAGTTTCTC	CTGCTTTGCC	GGGCTCATCA	GGCTTGGAGC	CAGTGGCTGG	420
GGCTGCTTCG	GCACTAGTGG	TGCCTTCTCC	CTTCTTCTCC	ACCCCATCGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

GAATTCGCCT	TCATGGCCTA	CAAGCTCTAG	CCTAGACCTT	TAGTGTGCCA	TGCAGTCACA	60
GGTCTGAAAA	GCAGCATCAT	CCAAACCTTA	CTTAATCTCT	AAAATCTCAG	CTGGTGGACA	120
GCTCATGATT	AGTTCAGCCC	ACTTCCTCCC	CCTTAGTTGA	GTTTGACGCA	GGACGCAGGA	180
GATAAGCACT	TCCAAGCAAG	TCTGATTTAT	ATATCAAACCT	CGGTCTCCAT	CCCAGGCCAG	240
CTGACCCTCA	GAGCCAGCAA	TGCTCTGTGC	TTCTCTCCCTG	CGTCACGGCT	TGGCAAGAGC	300
TGCCCTCTGCT	GAGCAGTGTG	TGTGATGGAG	ACGGAGGCCG	CTGAAGGCCG	AGTGCTTGCA	360
GGCTTGTAAG	CTGCCATCGA	ACACAATCCA	AACTCTGGAA	ATGTTCTCTGA	CCACCTAAGC	420
CCTCAACAAC	GTAATGCCTG	TATGTGCTNT	TTNTCAGTAA	ACTCCTTGCT	CATGTCNATA	480
AAGTATCCCT	GAACACTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GCGGGCACCA	TTTCCAGTAT	GTACCAAACC	AAAGCCGTCA	TCATTGCAAT	GATCATCACT	60
GCGGTGGTAT	CCATTTCAGT	CACCATCTTC	TGCTTTCAGA	CCAAGGTGGA	CTTCACCTCG	120
TGCACAGGCC	TCTTCTGTGT	CCTGGGAATT	GTGCTCCTGG	TGACTGGGAT	TGTCACTAGC	180
ATTGTGCTCT	ACTTCCAATA	CGTTTACTGG	CTCCACATGC	TCTATGCTGC	CTCGGGGGCC	240
ATTTGTTTCA	CCCTGTTCTT	GGCTTACGAC	ACACAGCTGG	TCCCGGGGAA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```

GCTCCACCAG CTACTGAGAA AATGGCCTGT AAAGATCCAG AAAAACCCAT GGAGGCCTGT      60
GCCTCAGCAC ATGTGCAACC CAAGCCTGCC CCTGAAGCCA GTAGCCTAGA GGAGCCCCAT      120
AGCCCAGAAA CAGGGGAGAA GGTAGTAGCA GGAGAGGTAA ACCCACCCAA TGGCCCTGTG      180
GGGGACCCAC TGAGCCTCTT GTTTGGGGAT GTGACATCCC TGAAAAGCTT TGATTCATTG      240
ACAGGTTGTG GTGACATAAT AGCAGAACAA CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```

GAATTCGGCC TTCATGGCCT AGCCAGACAA CTTGTACTGA TCTTCTTTG CTTTGCCTAC      60
TAATCACACA CACCCTCTCT TCTAGCCTGT GAAGACTTAA CTGATTTTCT ACGGATGAAG      120
GTTTCAGTGT CCCAAGGCCC CATACCGTAT CTGATTTTAC TTTATTTTGT TTTGTTAAGC      180
CTAACAGCTT CTGAGGAGCC ACGTAGAGCT CAAGAAGCAA AAGCTACTGA GAGTAGATGC      240
TATGTAAACT GCACAAGACG TCTCGAG                                267

```

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

```

GAATTCGGCC TTCATGGCCT ACAAAAAGAT GCTGGACAAG GCGTTTGCAG AGCGGATCAT      60
CCATGACTAC AAGGATATTT TCAAACAAGC AACTGAAGAC AGGCTCACCA GTGCCAAGGA      120
ACTGCCCTAT TTGAAGGTG ATTTCTGGCC CAATGTGTTA GAAGAGAGCA TTAAGGAACT      180
AGAACAAGAA GAAGAGGAGA GGAAAAAGGA AGAGAGCACT GCAGCCAGTG AAACCACTGA      240
GGGCAGTCAG GCGCAGAGCA AGAATGCCNA GAAGAAGAAC NACNAGAAAA CCAACAAGAA      300
CAAAAGCAGC ATCAGCCGCG CCAACAAGAA GAAGCCAGC ATGCCCAACG TGTCCAATGA      360
CCTGTCCCAG AAATCGAG                                379

```

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

```

GAATTCGGCC TTCATGGCCT ACATAATTTG AATCAACACA ACCACCCACA GCCTAATTAT      60
TAGCATCATC CCTCTACTAT TTTTAAACCA AATCAACAAC AACCTATTTA GCTGCTCCCC      120
AACCTTTTCC TCCGACCCCC TAACAACCCC CCTCCTAATA CTAACCTACCT GACTCCTACC      180
CCTCACAATC ATGGCAAGCC AACGCCACTT ATCCAGTGAA CCACTATCAC GAAAAAACT      240
CTACCTCTCT ATACTAATCT CCNNACAAAT CTCCTTAATT ATAACATTCA CAGCCACAGA      300
TCTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

```

GGATGCGGCC GCGGAGGGTC AGGTCGTTTC TGCGCGGGCT CCCGCGCTG CTAAGTCTGC      60
TGCTCTTCCT CGGGCCCTGG CCCGCTGCGA GCCACGGCGG CAAGTACTCG CGGGAGAAGA      120
ACCAGCCCAA GCCGTCCCGG AAACGCGAGT CCGGAGAGGA GTTCCGCATG GAGAAGTTGA      180
ACCAGCTGTG GGAGAAGGCC CAGCGACTGC ATCTTCCTCC CGTGAGGCTG GCCGAGCTCC      240
ACGCTGATCT GAAGATACAG GAGAGGGACG AACTCGCCTG GAAGAACTA AAGCTTGACG      300
GCTTGACGCA AGATGGGGAG AAGGAAGCGA GACTCATACG CAACACACTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GGATACCCTA AAAAAACAAT CTATGTCAGA GGCTTCACTG GAGGTTACGT CACGTTATCG      60
TATTAATTTA GAAGATGAGA CACAGGATTT AAAGAAGAAA TTAGGTCAAA TCAGAAATCA      120
ATTGCAAGAA GCACAGGATC GACATACAGA AGCTGTCAGA TGTGCTGAGA AGATGCAAGA      180
TCACAAGCAA AAGCTTGAAA AAGATAATGC CAAGTTAAAA GTTACAGTCA AAAAGCAAAT      240
GGACAAAATT GAGGAGCTTC AGAAAAACCT GTTAAATGCA AATTGTCTG AAGATGAAAA      300
GGAACCTGAG                                         310

```

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GTTTGATGA TTGGTGGCGT GTACGCAGCT GCTATGGCCT GGGCCATCAT CCCCCACTAT      60
GGGTGGAGTT TTCAGATGGG TTCTGCCTAC CAGTTCCACA GCTGGAGGGT CTTGCTCCTC      120

```

GTCTGCGCCT TTCCTTCTGT GTTTGCCATT GGGGCTCTGA CCACGCAGCC TGAGAGCCCC	180
CGTTTCTTCC TAGAGAATGG AAAGCATGAT GAGGCCTGGA TGGTGCTGAA GCAGGTCCAT	240
GATACCAACA TGCAGCCAA AGGACATCCT GAGCGACTCG AG	282

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG	60
TGCTACAATA TGTGCTGTTT CTTTGTGTTG AATGCAGAT TGTCTACTAT GAAGCAGGGA	120
TTATTCTATG CTGTGTCCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT	180
TCTTTGTAT GTGTGCTTGC TGTAAACAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG	240
AAAATGGGCC CTTCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA	300
TAAGCATTGG CATCTTCTAT GGTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

TCGAGGGACA TGAGGCTGAG CTGGTTCCAG GTCCTGACAG TACTGTCCAT CTGCCTGAGC	60
GCCGTGGCCA CGGCCACGGG GGCCGAGGGC AAAAGGAAGC TGCAGATCGG GGTCAAGAAG	120
CGGGTGGACC ACTGTCCCAT CAAATCGCGC AAAGGGGATG TCCTGCACAT GCACACACG	180
GGGAAGCTGG AAGATGGGAC AGAGTTTGAC AGCAGCCTGC CCCAGAACCA GCCCTTTGTC	240
TTCTCCCTTG GCACAGGCCA GGTCAACAAG GGCTGGGACC AGGGGCTGCT GGGGATGTGT	300
GAGGGGGACC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTTTAAT TAAGAAATCG GCCTTCATGG CCTAATCGAG GAGAATGGAG ACCAAACCTG	60
TGATAACCTG TCTCAAAACC CTCCTCATCA TCTACTCCTT CGTCTTCTGG ATCACTGGGG	120
TGATCCTGCT GGCTGTGGGA GTCTGGGGCA AACTTACTCT GGGCACCTAT ATCTCCCTTA	180
TTGCCGAGAA CTCCACAAAT GCTCCCTATG TGCTCATCGG AACTGGCACC ACTATTGTTG	240

TCTTTGGCCT GTTTGGATGC TTTGCTACAT GTCGTGGTAG CCCATGGATG CTGAAACTGT	300
ATGCCATGTT TCTGTCCCTG GTGTTCCTGG CTGAGCTCGT AGCTGGCATT TCAGGGTTTG	360
TGTTTCGTCA TGAGATCAAG GACACCTTCC TGAGGACTTA CACGGACGCT ATGCAGACTT	420
ACAATGGCAA TGATGAGAGA ATGCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

GGGCTTTAAA GGCAGACATT GATGCTACAT TATATGAACA AGTCATCCTG GAAAAAGAAA	60
TGGGAACCTTA TTTGGGCACC TTTGATGATT ACTTGGAGTT ATTCCTGCAG TTTGGTTATG	120
TGAGCCTTTT CTCCTGTGTT TACCCATTAG CAGCTGCCTT TGCTGTGTTA AATAACTTCA	180
CTGAAGTAAA TTCAGATGCC TTAAAAATGT GCAGGGTCTT CAAACGTCCA TTCTCAGAAC	240
CTTCAGCCAA TATTGGTGTG TGGCAGTTGG CTTTTGAAAC GATGAGTGTT ATATCTGTGG	300
TCACTAACTG TCGCTGATT GGAATGTCAC CACAAGTGA TGCAGTCTTT CCAGAATCAA	360
AGGCAGACCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GTACAATCTG AATCCAGGTC TGACAGCTGG CCATACAAAG TCATACTTTC CCCACATCCC	60
TCCTCTTTGA TAGGCATTGT CATCTAGAGC AATAGCCTCG AAATAGACTG AACACCGTGG	120
CCCATAGCTT AACTCCGTTT CACCTCTATT TCAAAGTAAA CTTGGGCTGG GATTACAGGC	180
ATGAGTATGT TTTCATTGT ACATAAAGAC TTTATACAAA TGCTCTTCCT AATATTGTCT	240
ACTTATTTT GCATTAGTTC AAATTCTTTG TCCTGTCTATC CCAAACTCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GAATTCGGCC TTCATGGCCT AACTGCACG GGGAACCCCG GAACCATCAT CGTGCCACCC	60
CTGAAAACCC AGGCCAGCGA AGTATTGGTG GAGTGTGATA GCCTGGTGCC AGTCAACACC	120
AGTCACCACT CGTCCTCCTA CAAGTCCAAG TCCTCCAGCA ACGTGACCTC CACCAGCGGT	180
CACCTTTTCA GGAGCTCATC TGGAGCCATC ACCTACCGGC AGCAGCGGCC GGGCCCCCAC	240

TTCCAGCAGC AGCAGCCACT CAATCTCAGC CAGGCTCAGC AGCACATCAC CACGGCCGTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCACAAGCC TGTCAGCAAG TGGGGCTACT TGGGTCCTCG GGCCTCAATC CACTCCTGGC 60
CAGAGACAAC TTCTCTCTCC ATGGGAAAGG CTAACGCATG CCCATAAATT AAGACATTTG 120
CTCTCCCTCC AAGCCCTGGA AACCTGGGAC TCTCTAACAT CTACCTCTGT TTTCTTTGGC 180
TGCATTCAAC TTTCCTGCAA TTAGTCAGGC CCTGGGGCAG CAGTTAGACG ACAGATGAGT 240
CAGAGGATTG CAGAATCTAA TCCAGAAGGA AGAGTTTATC CAAATGTTGG TGGCCTTTCT 300
CTTTTGGCGC ATTCTCTTCT GGTCTGTCT TTTCTCAGGA GTCCTCTGAG CTTCATGTA 360
CCGGGCCCCC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCAAGGGCAG GCGGGTCCCC CAGTCCC GCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG 60
CAGGGCTCCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTTGT CAGACCGTCT 120
GCGTGTGGCA TTTTGTGGCT TATAAGCTTC ACCCACTCAC CCCCAACCCA CACCCACAT 180
CCCCCTGCCG GCAGCCCCTC AACCTAAGAA GGCCAGAGCA TATTTATTTT CGGAGGGAGC 240
AGATTACTTC TCCAGAGAA AGGAAATCT TGGAAAAGAT TTAACACAC AAATCTAAGC 300
CTTGACGGTT TTTTGTCCC TTGTGACCCC CTCCCATTT TTTCAGNATT TATCCCATG 360
GCTTTTTTTT TTCTGTGCG TGTCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GAATTCGGCC AAAGAGGCCT AAGCAGGCGC GAGGCGGCGG CAGCGAGCCG GGTCCCACCA 60
TGGCCGCGAA TTATTCCAGT ACCAGTACCC GGAGAGAACA TGTCAAAGTT AAAACAGCT 120
CCCAGCCAGG CTTCCTGGAA CGGCTGAGCG AGACCTCGGG TGGGATGTTT GTGGGGCTCA 180
TGGCCTTCCT GCTCTCCTTC TACCTAATTT TCACCAATGA GGGCCGCGCA TTGAAGACGG 240

```

CAACCTCATT GGCTGAGGGG CTCTCGCTTG TGGTGTCTCC CGACAGCATC CACAGTGTGG      300
CTCCGGAGAA TGAAGGAAGC TGGTGACAT CATTGGCGCC TTACGGACAT CCAAGCTTTT      360
GTCTGATCCA AACTATGGGG TCCATCTTCC GGCTGTGAAA CTGCGGAGGC ACGTGGAGAT      420
GTACCAATGG GTAGAAACTG AGGAGTCCAG GGAGTACACC GAGGATGGGC AGGTGAAGAA      480
GGAGACGAGG TATTCCTACA ACACTGAATG GAGGTCAGAA ATCATCAACA GCAAAAACCT      540
CGACCGAGAG ATTGACACA AAAACCCAG TGCCATGGCA GTGGAGTCAT TCATGGCAAC      600
AGCCCCCTTT GTTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GAATTCGGCC AAAGAGGCCT AGGACTTGTT TCGGAAGGAG CTGACTGGCC AATCACAATT      60
GCGAAGATGA AGGCTCTGTG GGCCGTGCTG TTGGTCACAT TGCTGACAGG ATGCCTAGCC      120
GAGGGAGAGC CGGAGGTGAC AGATCAGCTC GAGTGGCAA GCAACCAACC CTGGGAGCAG      180
GCCCTGAACC GCTTCTGGGA TTACCTGCGC TGGGTGCAGA CGCTGTCTGA CCAGGTCCAG      240
GAAGAGCTGC AGAGCTCCCA AGTCACACAA GAACTGACGG CACTGATGGA GGACACTATG      300
ACGGAAGTAA AGGCTTACAA AAAGGAGCTG GAGGAACAGC TGGGTCCAGT GCGGAGGAG      360
ACACGGGCCA GGCTGGGCAA AGAGGTGCAG GCGGCACAGG CCCGACTCGG AGCCGACATG      420
GAGGATCTAC GCAACCGACT CCGGCAGTAC CGCAACGAGG TGCACACCAT GCTGGGCCAG      480
AGCACAGAGG AGATACGGGC GCGGCTCTCC ACACACCTGC GCAAGATGCG CAAGCGCTTG      540
ATGCGGGATG CCGAGGATCT GCAGAAGCGC CTAGCTGTGT ACAAGGCAGG GGCAGTCGAG      600

```

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCAATGGCCT AGTATTTCTT TATCACAGAT TTTGGGAGCA ACAGTGTTTT      60
CCCATCTGGA GGAGGCTGAG TTAATTCTGT GGAACACCCA TTTGGTTGGA AATAAAACA      120
CAGCATGGAT TTAATTCATG CCACTTATTT ATTTTATTA GGAATTGAGC TTCTTTGTAT      180
TTTTTTTCTT TTGCTTCCAC TCAAAACCAG ATTTGGTGGT TGCTGTGTAA ACAGTGAAAT      240
ACAACACAGG CCAGGACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC AAGAGGCCTA GTATTCTTTC GTTCTCTCT AAAAGAAGAA AAATATAATT      60
TAGAAATACA TTGCGTATTT TCTAAAACAA TAAATTTATA GTGTTAATAT TCATAGGGTC      120
AATCAAAATG AAGCTTCTCC TTGGGCGCTG CATTGTATGT GTTGCTTTTG CAAGGAAGAG      180
ACGGTTCCCC TTCATTGGTG AGGATGACAA TGACGATGGT CACCCACTTC ATCCATCTCT      240
GAATATTCCT TATGGCATA C GGAATTAC ACCTCCTCTT TATTATCGCC CAGTGAATAC      300
AGTCCCCAGT TACCCTGGGA ATACTTACAC TGACACAGGG TTACCTTCGT ATCCCTGGAT      360
TCTAACTTCT CCTGGATTCC CCTATGTCTA TCACATCCGT GGTTTTCCT TAGCTACTCA      420
GTTGAATGTT CCTCCTCTCC CTCCTAGGGG TTTCCCGTTT GTCCCTCGAG      470

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC AAAGAGGCCT ATGCAGATTC TGTGGTTATA CTCACTCCTC ATCCCAAAGA      60
ATGAAATTTA CCACTCTCCT CTTCTTGGCA GCTGTAGCAG GGGCCCTGGT CTATGCTGAA      120
GATGCCTCCT CTGACTCGAC GGGTGCTGAT CCTGCCCAGG AAGCTGGGAC CTCTAAGCCT      180
AATGAAGAGA TCTCAGSTCC AGCAGAACCA GCTTCACCCC CAGAGACAAC CACAACAGCC      240
CAGGAGAGTT CGGCGGCAGC AGTTCAGGGG ACAGCCAAGG TCACGTCAAG CAGGCAGGAA      300
CTAAACCCCC TGAATCCCAT AGTGGAGAAA AGTATCTTAC TAACAGAACA AGCCCTTGCA      360
AAAGCAGGAA AAGGAATGCA CGGAGGCGTG CCAGGTGGAA AACAATTCAT CGAAAATGGA      420
AGTTCCTCG AG                                     432

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GAATTCGGCC AAAGAGGCCT AAAAAGTATA TACATTTTAG TACTGCTTTG ATTTTGTTTA      60
CATACTGAAA AATGTATCTG AAAATGAGTT ATTTTGGACT CGAG                          104

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC AAAGAGGCCT ATTCATTCA GCTTCACTGA CTTCTGGATT CTCCTCTTGA      60

```

GTAAAAGGAC TCAGCCAAC TGAAGTTTT TTGTTTTTC TTTAATCTTG GCTCTCATGC	120
TTTCCATGAC TGGAGCTGAT TCACATGCAA AGAGACATCA TGGGTATAAA AGAAAATTCC	180
ATGAAAAGCA ACATGATCTC GAG	203

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC ACAGAGGCCT AGCCAGTCT CGGGTATGTC TTTATCAGCA GCATGAAAAT	60
GGACTAATAC AGTTGCTATG ATTATTAGT TTTTGCTACT GAGTTGTAGG AGTATCTGAT	120
ATATATTTTG GTAAC TAATC CCTTATAAAA TATATTGTTT CCAAAATATT TTTTCCCAT	180
CCATAGGCTG CCTTTTCATT CTGTGTTTC CTTTGCTTCA GGTAAGGGAT TCTGAAACAA	240
CTATTGGGC AGCAGAACAG CTTCTTTTGT TTGCTTTCTC ATTGTCTACT GTGTTCTGCA	300
TAAATAAGGT TATGAATTAG CTGTGTTTCA TATGGGTGAA AGATTTCAT CTGTGGACGC	360
TTAGATAGCA CATATGGTAA ACCATAGAAC TTCACCATT ATAACCTTTG AACAACTGAT	420
ACACTTAGAA AAGCAGTTTT TGGCTGGGCG CGGTGGCTCA TGCCTGTAAT CCCTAGGCCT	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGCTGACA ACTATGAAGT	60
TTTTTGTTTT TGCTTTAATC TTGGCTCTCA TGCTTTCCAT GACTGGAGCT GATTACATG	120
CAAAGAGACA TCATGGGTAT AAAAGAAAAT TCCATGAAAA GCATCAAGGA CTCGAG	176

(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC AAAGGGCCTA ATTTTATTAA TAACATTTTA AAAACAACAA TTATGAAAAA	60
GCAATTCGGT TTACCGCTGA TGCTTGCGTC AGCCCTCGCC TTCTCTGCTT GTAGCTCTGA	120
TGATGTGGCC GAGAATGGCC CAAAGGACAT CGCAGCTCTT ACAGATGGTG GTTACTTGAA	180
GATGTCTATC AATCTTCCTT CCCGTGCTGC TAATGGTGCC TTCAGAGCTA CGGAACAAGA	240
CGGTTATGTT AACTTGGAAG ATGGATTGGC AAAAGAGTAC AATGTAAAGG ATGCTATCCT	300

CGTCCTTTTC CAAGGTGATA ATGAAGCAGA TGCCAAGTTC CATTCTGCAT ATGAACCTAC 360
TACATCAATG CAGAAGGATG GCTCTACGCA AATCACTTCC ACAACGAAAC TTGTTAAGAA 420
TGTGAATATT GGTGGTCAGG GAAATCCTCT TAAACCTGCT GATGTTAAGC TCGAG 475

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTCGGCC AAAGAGGCCT ACAATTATGG GGCTTATGGG GAACATGCTC ATTGTGTTTT 60
ACCAATCAGG ACATGGAAC TAAACAATAT TTGTTGACTT ATAGTGAAAC CTGGCTAATT 120
AGGACTCTTA ACCAGCACTC TTAATTAAC TACTTATTTT TCTCTGTGTC CACCCCTCTT 180
AAAGAAAAAG AAGCGAACT CGAG 204

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGTAG GCCTCTTTGG CCGATTGAAT 60
TCTAGACGCG GCTCGAGGCA GGTCTAGGCC TCTTTGGCCG AA 102

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

GAATTCGGCC AAAGAGGCCT ACTCAATTGT TCCTTTCTTC CATCACCACC CTTTGAAGGT 60
CTCTTTGCCT ACTGTAGAT TTAGGGGGAC ATAACATTGA GACTGAGCAG TTTCTTGAAC 120
CTCTCCTCTC AGCAGCCACC AGCCTGGCTT TCGCAGACCA CTGGAAAAGTA TCCCAGCTCA 180
TTAGCTTTTG GAATGACGGG AAGCCTTTTG ATGTTNGACG TCTTAATCTC AACTCTTCAA 240
CTTAGCTCAT TCTGGAGCAG TCACGCGATG ACAGATGAGC TCGAG 285

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GATAACTTGA	GATCAAATCA	GTCATATTTG	ACTCTTCTCT	TTTTCACTCC	TTTTATATCT	60
GATCAGTCAG	CAGTTTTTTG	AAACCCTGTT	CGAAGCAGTT	CTCAACACTT	GTGCACCCAT	120
TCTTTCTCCT	ACACCACTCA	ATCTAGACCC	TCACATGTGG	CTGTCCTGCT	TTCTTCTCT	180
CCTACTTCTA	AGCTATTCTG	TGGAGAGATG	TCAAAGTAAT	CTTCACAAA	AATCTGATTG	240
CATCACTTCA	CATCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 374 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GGGCTTTAAA	GGCAGACATT	GATGCTACAT	TATATGAACA	AGTCATCCTG	GAAAAAGAAA	60
TGGGAACCTTA	TTTGGGCACC	TTTGATGATT	ACTTGGAGTT	ATTCTGTCAG	TTTGGTTATG	120
TGAGCCTTTT	CTCCTGTGTT	TACCCATTAG	CAGCTGCCTT	TGCTGTGTTA	AATAACTTCA	180
CTGAAGTAAA	TTCAGATGCC	TTAAAAATGT	GCAGGGTCTT	CAAACGTCCA	TTCTCAGAAC	240
CTTCAGCCAA	TATTGGTGTG	TGGCAGTTGG	CTTTTGAAAC	GATGAGTGTT	ATATCTGTGG	300
TCACTAACTG	TGCGCTGATT	GGAATGTCAC	CACAAGTGAA	TGCAGTCTTT	CCAGAATCAA	360
AGGCAGACCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC	TTCATGGCCT	AGATAAGTAA	ATAGACTTAC	AGAGGGAAAG	TAACTGGCT	60
AAGGTGAACT	TGAACCAAGA	TGACTGACTC	CAGAGCTTCC	ATTTTCTTT	TCTTTCTTT	120
TTTTTTTTTT	NGGAGACAGA	GTCTCACTCT	GTCGCCCAGG	CTGGAGTGCA	ACGGCGCGGT	180
CTCCACTCAC	TGCAGCCTCC	AGCTCCTGGG	CTCAAGTGAT	CCTCCACCT	CAGCACCCCC	240
ACGTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

```
GAATTCGGCC TTCATGGCCT ACAGGGAGGG AGGGGTTCTG AGAGCCTCAG ACCACAGGGC    60
CTGAGGCCCA CAGTGGCCCA GAGTCCATCT GGCAGCCCCT GCTCTGCTGG CCCAGGGGGC    120
TCTCCCAGG GTGGAGTAGG CAGGGGAGGG TCGCTGGTCC CCAGTCCCAG CCTTCGAGAG    180
GTGGGGCCAG ACAGCAGGGC ACCCGTACCC GAGACCACAG TGCTCCCCAA GGCCAGCTCT    240
CTCCCCAGTG AGGTCACTCC TACCTCCGGG GCCATTGGG GCGGGGGATC CTGTAGATCT    300
CTGACTCTGC GGCGCCTTAT CTTGATGGCC TGGCNCAAGA AGGGAGGGCG CTGCCCACTT    360
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

```
TTTTGACTGA CTCTTTAAAT TAGTACAATT TTTCTACTTG TCATATAACT CCTGGAACAA    60
TAGTACGGGA AGCCGTGATC CTTTCCCTG ACTCATGATT TTAGTCTTTT TCAAATCGC    120
TGTTTTTTTT TGGTTTTTTT TTTTTTGTCT GCTCCAACGA CCAGCATGTG TTGGAGCAGA    180
TCTCCATGGT AAGCCAAAAG TGGACTTGTC AGCCTATAAC TACTCTGCAG CTGCCACTAA    240
CTCTACAGGC ACAGAGCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```
CAGAAACTCT TGGACTCAA AGAGAAAGAA AAAAGTCAAG CCAAGGAAAG CACAAGAGGT    60
AAGACAGGCC TAGTGATCTC AGCAGGCAGA ATTTATGGAC ATATTTTGCA GGCAAGTGGT    120
TCTCAATCAG GGGTGATTTT TGGCTTGTA GGACATTAG CAATATCTGG ACACATTTT    180
TGGTTGTCGT AAGTGGATGG GGGTTGCTGC TATCATCCTA CAATGCATAG GTGCATTAGT    240
CTGTTTTCAT GCTGCTGATA AAGACATACC GGAGACTGGG CAATTGCAA ATGAGAGATG    300
GCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAATTCGGCC	TTCATGCCTA	CAGCCATATT	AAACTAAGT	AAACTCGTCC	CTGGGAACTA	60
CACTTTCAGC	TTGACTGTAG	TAGACTCTGA	TGGAGCTACC	AACTCTACTA	CTGCAAACCT	120
GACAGTGAAC	AAAGCTGTGG	ATTACCCCCC	TGTGGCCAAC	GCAGGCCCCA	ACCAAGTGAT	180
CACCCTGCCC	CAAACTCCA	TCACCTCTT	TGGGAACCAG	AGCACTGATG	ATCATGGCAT	240
CACCAGCTAT	GAGTGGTCAC	TCAGCCCAAG	CAGCAAAGGG	AAAGTGGTGG	AGATGCAGGN	300
TGTTAGAACA	CCAACCTTAC	AGCTCTCTGC	GATGCAAGAA	GGAGACTACA	CTTACCAGCT	360
CACAGTGAAT	GACACAATAG	GACAGCAGGC	CACTGCTCAA	GTGACTGTTA	TTGTGCAACC	420
TGAAAACAAT	AAGCCTCATC	AGGCAGATGC	AGGCCAGAT	AAAGAGCTGA	CCCTTCCTGT	480
GGATAGCACA	ACCCTGGATG	GCAGCAAGAG	CTCAGATGAT	CAGAAAATTA	TCTCATATCT	540
CTGGGAAAAA	CACAGGGACC	TGATGGGTGC	AGCTCGAG			578

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 623 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCC	TTCATGGCCT	AACTTTGTGT	GATCAGAGTT	TATGGGTTGG	GCTGCCCCAG	60
GCTTGGATAA	CTTAAAGGCT	TGATGAGGTC	ATCAATTTAT	GCTTGGCTAC	CCATGGCACA	120
GAAGCATAGC	CCCACTGTGA	TGGCTGGGGT	GGCTCCGGGC	ATCCTGGGCA	GTGAGGAGGA	180
AACTCCATGA	AGGAAGGAGC	TAACCTTTCT	GGGGGTACCC	CTATCCCAGC	ACAGACTTCC	240
TCATCTCATT	GGTCAGAACT	GGGTCACATG	AACATGCCTC	AGCCTATCAC	AGGCACAGGG	300
AATGAGACCA	TCATGGACCA	ATCAGGATTC	ACCACTCAAG	GTGGGGCCTG	CCATCCGGAT	360
GGATGCTCTC	CGCCACAGGG	AGGTGGGGGA	CCCAGAAGCT	GTGGGCAATG	GCCATGTGCA	420
CAGTAGGACT	GAGGCACTCA	GTCCCGTAGC	TGACCTACCT	GGGACAGGCC	TGGAGGCTGA	480
CTTAGGTGTG	AGGGGCAGAG	AGATTACTGT	GCACAGACCG	CTGTGTGACC	CCAGATCTAG	540
GTGGGATCCC	GGTGTGCCCC	ATCTGCCTGG	CTTACCCCAA	CCCCTCTGGA	ACCTGAACCA	600
TTGAATTCTA	GACCTGCCTC	GAG				623

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC	TTCATGGCCT	ACTCCAGAAT	GAAGATCTTC	TTGCCAGTGC	TGCTGGCTGC	60
CCTTCTGGGT	GTGGAGCGAG	CCAGCTCGCT	GATGTGCTTC	TCCTGCTTGA	ACCAGAAGAG	120
CAATCTGTAC	TGCCTGAAGC	CGACCATCTG	CTCCGACCAG	GACAACTACT	GCGTGACTGT	180
GTCTGCTAGT	GCCGGCATTG	GGAATCTCGT	GACATTGGCC	CACAGCCTGA	GCAAGACCTG	240
TTCCCCGGCC	TGCCCCATCC	CAGAAGGCCT	GCTCGAG			277

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```
GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTTAATA ACTGTATAG CTAAAACTT      60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATAA      120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG      180
TCGTTTGGAG TTCATTTTCA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC      240
CAGAACTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```
GAATTCGGCC TTCATGGCCT ACAGTCTAAG ACATTTCTTA TTCTGCCTTC TTGTCTTCCT      60
CCCTCTCTTC CACATTGGTC AGACTTACAT CTTGGACAGC TCTCCAGCC ATCTTCTACT      120
GCCTCCCTAT TTTTCCCTCC CAGACTTTTC CCCGCAAAAC ATCTGTTGCA GGTGGTATTA      180
ATTTCCATC ACGGCTGTGA CAAATTACCA CAACTCAGT GGCTTAAAC AATGCACATT      240
TATTATCTGA CAGTTCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```
GAATTCGGCT TCATGGCCTA GCAAGACTCC ATCTCAAAA AAGAAAGAAA GAAAAAGAA      60
AGTACAAGTT TATAAAGTAT TATAGTGAAA AATTCGCATT CTGGCTGATT TTAAGCCATT      120
TAAATTTTAT ATAAACAAC CTTCCATAAA AATTGACAG GTGCCAGAT GTTGCTTTCT      180
CCATTTATTT TTTGTTTTTT TTTAATCACA CTCGAG                                     216
```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GCGATTGAAT TCTAGACCTG CCTCGAGTAA GTGCCGAAAA CTTCAGTGTG CTCATCAAGA	60
ACAATATCGA CTTCCCCGGC CACAACCTACA CCACGAGAAA CATCCTGCCA GCTTTAAACA	120
TCACTTGTAC CTTCCACAAG ACTCAGAATC CACAGTGTCC CATTTCCTGA CTAGGAGACA	180
TCTTCCGAGA AACAGGCGAT AATTTTTCAG ATGTGGCAAT TCAGGTTGGT GGTGCTTTGT	240
AACTGGGAT GTGGGGCTGT GTGTCTAGGG ATGAGGATG TCAAACAAC CGAG	294

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTCGGCC TTCATGGCCT ACCTTCACAG AAAAATGCAT AGCTGGATGC TGCAGACTCT	60
AGCGTTTGCT GTAACATCTC TCGTCCTTC GTGTGCAGAA ACCATCGATT ATTATGGGGA	120
AATCTGTGAC AATGCATGTC CTTGTGAGGA AAAGGACGGC ATTTTAACTG TGAGCTGTGA	180
AAACCGGGGG ATCATCAGTC TCTCTGAAAT TAGCCCCCCC GATCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC TTCATGGCCT AGCTTACTTT ACAATTCTGC TGTGTGTCAG GTGTTCTAT	60
AGTTTTTTTT AAAGGTATGT TAACTATTTT TCCCTTTTGG TTTATATTTG TAGGAATCTT	120
TGCCTTTAAG TGTGCCCGTG CAGAAGAATT ATTTAACATG TTGCAAGAGA TTATGCAAAA	180
TAATAGTATA AATGTGGAGC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAAGTGTAAT GTCAGACACA CAAGAAAAGC AAATCAGTGT TGTAAGCTTA AAGTACAATT	60
TCAAAGGTCA TTACCAACAG CAGCGTTTTT TTTATACTTT AAAACATTA TGCTACATAT	120
CATTGCCATT TTCATATTTT GGGGTTTTGC TACTCTTATA CAATGGAATC AATGGAAATG	180
TCATCCAGCC AGATCTCGAG	200

(2) INFORMATION FOR SEQ ID NO:582:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCC TTCATGGCCT ACACAAATGT TTGTTGAGTG CTCATTGTAT GTCTGGAGAC      60
CATTCTGTCT TCTTCCCTAA GAGTGTTTCAT GCTGTTGGAC CAGGTGTTAT GATTTTGCTC      120
TGGAGAATAA GGTATTTCCA CATGGAGCAT GTGAAAAATA TAGTGCCCTAT CTCCTGAAAG      180
GTCCAGGTGA TGCAAAGATG AATGAGACAT GATTGGAGGT TTTTCTTCTG TCTGAAATGC      240
AGACAGTTCT GGGTTGGGCA GCTCTGTAAG ATGCTGAACA TGTGTCCTTC CAAGAAGCAA      300
GGATCAGAAA GCAGACTCTA G

```

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC TTCATGGCCT ACACCAATTGA CTTCTTCTAC CGGCCGCATA CCATCACCCT      60
GCTCAGCTTC ACCATCGTCA GCCTCATGTA CTTGCCTTTT ACCAGGGATG ACTCTGTTC      120
AGAAGACAAC ATCTGGAGAG GCATCCTCTC TGTTATTTTC TTCTTTCTTA TCATCAGTGT      180
GTTAGCTTTC CCAATGGTC CGTTCACCTG ACCTCATCCA GCCTTATGGC GAATGGTTTT      240
TGGACTCAGT GTGCTCTACT TCCTGTTCCT GGTATTCCTA CTCTTCCTGA ATTCGAGCA      300
GGTTAAATCT CTAATGTATT GGCTAGATCC AAATCTTCGA TACGGCCACC TCGAG      355

```

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GGAAACTTCT AGAAATAATG ACAAGGATTC AACTTTATTG TCAAATGAGT CCAATGTCAG      60
ATTTTGGAAC TCAACCTAT GAACAATGGG CCATTCAAAT GGAAAAAAG GCTGCAAAAG      120
AAGGAAATCG CAAAGAACGT GTTGTGTCAG AACATTGAG GAAGTACAAT GAGGCCCTAC      180
AAATTAAATGA CACAATCGA ATGATAGATG CGTATACTCA TCTTGAACT TTCTATAATG      240
AAGAGAAAGA TAAGAAGTTT GCAGTCATAG AAGATGATAG TGATGAGGGT GGTGATGATG      300
AGTATTGTGA TGGTGATGAA GATGAGGATG ATTTAAAGAA ACCTTTGAAA CTGGATGAAA      360
CAGATAGACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```

GAATTCGGCC TTCATGGCCT AGAGAACTG AGAGGAAGTT AAAGATTGT CTTACAAAGG      60
CTGTGTAGTG ATAAGACCTA AGGTTTCTC TGAGATTCAA AATGGGTATT ATTTGTTCTT      120
TAATCCTTCT GATTATTCTT TTGAAAAAA GGAAGTAGA GGAAAGGAAG TAGAAAAATA      180
ATATTCTTA TACTTATTAT GTACCAGACA TGGTGCTAAG TTCATTTAAA AACTGCCTC      240
ATTTAATCTT TGCAACCAAT TTATACCCAT ACACATAAGG CCACAAAAGC TCGAG          295

```

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```

GAATTCGGCC TTCATGCCTA AGGTAAGGGA AAGTGAGAAG CAGCAGGATA GTCAGCCTGA      60
AGAAGTTATG GATGTGCTAG AGATGGTTGA GAATGTCAAA CATGTAATTG CTGACCAGGA      120
GGTAATGGAA ACTAATCGAG TTGAAAGTGT AGAACCTTCA GAAATGAAG CTAGCAAAGA      180
ATTGGAACCA GAAATGGAAT TTGAAATTGA GCCAGATAAA GAATGTAAAT CCCTTTCTCC      240
TGGGAAAGAG AATGTCAGTG CTTTAGACAT GGAAAGGAG TCTGAGGAAA AAGAAGAAAA      300
AGAATCTGAG CCCCAACCAC TCGAG          325

```

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA      60
GAGCTTAGTG TATACAGATG AGGGTGTCG CTGCTGCTTT CCTTCGGAAT CCAGTGCTTC      120
CACAGAGATT AGCCTGTAGC TTATATTGGA CATTCTTCAC TGTCTGTTGT ATACCTACCG      180
TAGCTTTTTC CCGTTCACCT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCTCTC      240
TGGACTTTCT CCAAAGGCAC TGGACCCTCG AG          272

```

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

GAATTCGGCC TTCATGGCCT AGCATCCCTG AACTGTGTA ATTTGAGGA TCCTTCTGGT	60
CTTAAAGCCA ATTTAGAAGG TGCTAATCTG AAAGGTGTGG ATATGGAAGG AAGTCAGATG	120
ACAGGAATTA ACCTGAGAGT GGCTACCTTA AAAAATGCAA AGTTGAAGAA CTGTAACCTC	180
AGAGGAGCAA CTCTGGCAGG AACTGATTTA GAGAATTGTG ATCTGTCTGG GTGTTAGCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

GAATTCGGCC TTCATGGCCT AAATTATACT CCAAATGTTT TATCTAAAAT GCATTTTCTG	60
TCTTTTCTTT TTTACTCTTG TCCTCACTTT TAATGATCCA TCGGCTGACA GTGTCTTTAC	120
ATCCAAAATG CAAAGCAGAC AAATGGGCAT ATCAGGGAAG AACATGACAA AAAGCACCAG	180
CATCAGTGGA GACATGTGCT CACTGGAGAA GAATGATGGC AGCCAGTCTG AACTGTCAGT	240
GGGCACCTTG GGCACCAGTG GCAAAAAGCG GCGCTCTAGC CTTGGTGCCA AAATGGTAGC	300
TATCGTTGGT CTGTCACGGA AAAGTCGCAG TGCTTCTCAG CTCAGCGGAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

GAATTCAAAT GCTTCAGGTA AATGTTGAAG CTCGGTGTAC CGCGGGACAA ATCCTGAGTC	60
ACCCCTGGGT GTCAGATGAT GCCTCCCAGG AGAATAACAT GCAAGCTGAG GTGACAGGTA	120
AACTAAAACA GCACTTTAAT AATGCGCTCC CCAAACAGAA CAGCACTACC ACCGGGGTCT	180
CCGTCATCAT GAACACGGCT CTAGATAAGG AGGGGCAGAT TTTCTGCAGC AAGCACTGTC	240
AAGACAGCGG CAGGCCTGGG ATGGAGCCCA TCTCTCCAGT TCCTCCCTCA GTGGAGGAGA	300
TCCCTGTGCC TGGGGAAGCA GTCCCGGCC CCACCCCTCC GGAATCTCCC ACCCCGCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTCGGCC	TTCATGGCCT	ACTCAGTCTG	CACAACCTTT	TTGCTGTGTG	TCGGAATATG	60
TATAACTGGC	TACTGCAGAA	TCCCAAAAAT	GTCTGTGTTG	TCCACTGCTT	GGATGGACGG	120
GCGGCATCAT	CAATTCTGGT	TGGTGCTATG	TTCATTTTCT	GTAATCTCTA	CTCTACTCCT	180
GGCCCAGCCA	TTGATTGCT	ATATGCAAAG	CGACCAGGAA	TTGGACTTTC	ACCATCCCAT	240
AGGAGATACC	TGGGCTATAT	GTGTGACCTA	CTGGCAGACA	AGCCCTACCG	CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTCGGCC	TTCATGGCCT	ACCGTAAGCA	GATGAAGCTG	CTGCTGTGTC	TGCTGTGCTG	60
GAGCTGCGCC	GCGTGGCTCA	CCTACGTGCA	CCTGGGCCTG	GTGCGCCAGG	GACGCGCGCT	120
GCGCCAGCGC	CTGGGCTACG	GGCGAGATGG	TGAGAAGCTG	ACCAAGTGAGA	CCGACGGCCG	180
GGGGGTCCAC	GCTGCGCCAT	CCACACAGAG	GGCTGAGGAC	TCCAGTGAGA	GCCGTGAAGA	240
GGAGACCAGC	GCAGACATGC	TGCGGCCAGA	TCCAGGGAT	TACCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

GAGAGATGGT	GACTGAGGCA	GAAGCTAATA	GGGAAGATGA	TAGGAAAGAA	ATTTTACCCA	60
AGGAATTAGA	TTTAGCAAGA	GAGCGAAGGA	AAGCTGAGAG	GCCAAAACA	TCTCTGAGGA	120
AAACTGACTC	TGAGAGAGAA	GAGGTGACAA	GGGCAAATGC	ACTCAAGGAT	GAAGATGCTT	180
TTAAGAAGA	GCAAAAACCT	AAAGCGGAAG	AAGGGGAAAC	AGAGACAGAA	GTAAGAGCTG	240
AGGAAGAGAC	AAAAGCTCCC	CCAAATGAAA	TGGGATCTGA	TGCTGAGAAC	GAAACACTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC TTCATGGCCT AGGATATTTA AACCTCTATT ATTTTAGACA AGACTGTCTA      60
GAACTTAAGT TTGATCTGTC AGCCAGTACT CCCATTAAAT TCAGTGTAGT TTCACTTGAT      120
AGAATCAGAT ATGTTATCGA AATGTTAGCA GCAGCTTCAT CCTCCTTCTG ATTAAAGTAA      180
GTAGAAATGG GATGTTTGT TTAATAACAG CCATAGTGTG TGTTTAGACC ACAGCGGATG      240
TTGTAGACCA GGACCCCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GAATTCGGCC TTCATGGCCT AGGGGCTTTT GTCAAGATAG AAGGGTATCA ACGGTTTCTG      60
TACAGCACAG ATTATGACAG CGTCTTTCTT AAGACTTATC ATTTGGAGCA CTGGCTCAGG      120
AGTCGAAATC ACCAATGGCT CATCCATCAA TCAACCAGAA GTGAAGACGA AAGCTTCAAA      180
GAAGAGAATG TTTAAATTTC ATCAAATCAA ACATATTTT GAAATACTTG ATAAATGAG      240
ATGCCTGAGA AAACGTTCTA CAGTGTCAAT CTGGGAGTT CTGTCAATTT TTCTCCTTTT      300
TATGAACTTG TACATTGAAG ATAGCTATGT TCTGGAAGGA GACAAACAAC TTATAAGGGA      360
AACTCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAATTCGGCC TTCATGGCCT ACTAACGACT CATCTTTGTT TTTAGTTTTT TTAATTAACA      60
ATCGTTCTGT TCACAATTTT TAATTCCTT TCTCCCCCT TCTCCGCAA GCACTCAGGC      120
ATCGGACACG CTATGGTAAA CAACTACAT TGTCTGGTAG ATATCATTCT TATTGTCTCT      180
TTTTTTGGGT TTGCCGTGTG TTGCCCCCT TTTCTCTCC AACCCCCCC ATTCCTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

```

GAATTCGGCT TCATGGCCTA GTGTATTGGT TGTGTGTGTT TTCCTTTTTC CATAAGAAAT      60
ATGTCCATTT AGTCCAGAGG CTCTTGCTTT ATCCGGATGA CGGAGGGTAC ACGGGGCGTC      120
CGCCTCAGTT CCCGCCGAAG GACGTATTTC CTGAAGTGGG ACGAGTCTAC TCCTCCCCCA      180
CAGGAGCCCA CGATTTCAAA TCCTCTTTCG TGCAACCTCT CGAG                                     224

```

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAATTCGGCC TTCATGGCCT AGATATTTTA AAGGAGTGAT GACATCTTTT TCCTATCATG      60
TGAAGAGGGG AAAGAGAAAG GAAAGGGCCC ATATTATTGT GTTCCTGCTT GTGCCAGCTG      120
TTCTATATCT GTTGATCTCA TTTAGTCCTC ATGACAGTTC TATGAGGAGG GCACTGTCAT      180
CATCACCATT GCACAGATGC AGAACTGTG GCTCACAGAG GATAAAGCTA GGTCACTCAC      240
ACAACCCCCT GACTCCAGAG CCACCACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGTAAGGGAG AACTGAATG GTGATTCAGA GCATAGAGAT      60
TATGTTTTTT TATGCACAGG GCTTCATCAG AAAAATGGAA GGAATTGTCA ATAACAATAA      120
AATGTTTCAGC TAGATCAACT CAGTATATAG TATGTATTAT ACAATTATTC AAAATAGTGT      180
TTAACAGTAC TGTAATAACA TGAATAAATG TTTTGTCTATA TTAAGTGAAA AAGAGCTATA      240
TAAATTTATC TAAGTTTATG GTATATGTAG ATTGTTGCAA AAATGTCTTC AATTCTTTAT      300
CCCTCCCTGT ATCCACACCT GTATCAGTTT TCTCGGGGCA GCTGCCTCGA G                                351

```

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAAC ATTAAAAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                                107

```

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GGAAAATTAC TTAAACGTTG CACACAACGT TTCACAAAAT CTTTGTGAA AGAAGAAAAG	60
GAAATTCAGT GTGTGAGTCT CAGCAGGAGT TAAGCTAATG CAGCTTAACA TCATGCCGAC	120
AAAGAAGCGC TTATCTGCGG GCAGAGTGCC CCTGATTCTC TTCCTGTGCC AGATGATTAG	180
TGCACTGGAA GTACCTCTTG ATCTGGTACA GCCTCCAACC ATCACCCCGC TAAATCCCCT	240
AGAAGTCCCA CTCCTAAACA CATCCGTATT ACTCGAG	277

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCAAAT TAACATTTTA CCTTGAAATA GTTGGCTTCA GATTAATATC AACTTAGTTT	60
CAATAGCATA GGAAATTTGC TTCACTATAT TTCCATTTTC TCCCCGTCCT TTGTGCTATT	120
ATTACTATAC CAATTAGATC TCTACACAAT ATAGGCATAT CAACACATTT TGTAAATTATT	180
TCCTTATCCA GTTGTCTTTT AATATAGATC TGTGAAGAAA AGTATTACAC AAATAGATCT	240
ATTCTGTTTT TTATAATTAT TTAATTACCT TTGGTGGTGC TGTTTATTTT TCATGCATT	300
GAGTTACTGT CTAGTATTCA TTCATTCTC TCTGAATCAC TCCCCGGTAT TGCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC TTCATGGCCT AGCCATCTTA TTTGAACTAT ATTTTTCCTT CAAAGAAGCA	60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT	120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTTCAGAAA AGACTGAAAA	180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG	232

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AAATATTTTC	CATCTTCCTC	TCCAGTAAAC	ATTCTTTTGT	60
CATCACAGTC	TGTCTCTGAC	ACCTTCGTTA	AAGAGGTCTT	AAAATGGAAA	TATGAAATGT	120
TTTTGAACTT	TGGTCAGTGT	GGGCCCCCTG	CAAGTCTTTG	TCAGTCCATC	TCAAGACCTG	180
TGCCTGTCAG	ATTTCACAAT	TATGGAGATT	ATTTTAATGT	TTTTTTCCCT	TTGATGGTAT	240
TGAATACTTT	TGAAACAGTG	GCACAAGCGG	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GAATTCGGCC	AAAGAGGCCT	AAAAATATAA	TTTAAAAATA	CATTGCGTAT	TTTCTAAAAC	60
AATAAATTTA	TAGTGTTAAT	ATTCATAGGG	TCAATCAAAA	TGAAGCTTCT	CCTTTGGGCC	120
TGCATTGTAT	GTGTTGCTTT	TGCAAGGAAG	AGACGGTTCC	CCTTCATTGG	TGAGGATGAC	180
AATGACGATG	GTCACCCACT	TCATCCATCT	CTGAATATTC	CTTATGGCAT	ACGGAATTTA	240
CCACCTCCTC	TTTATTATCG	CCCAGTGAAT	ACAGTCCCCA	GTTACCCTGG	GAATACTTAC	300
ACTGACACAG	GGTTACCTTC	GTATCCCTGG	ATTCTAACTT	CTCCTGGATT	CCCCTATGTC	360
TATCACATCC	GTGGTTTCC	CTTAGCTACT	CAGTTGAATG	TTCTCTCTCT	CCCTCCTAGG	420
GGTTTCCCGT	TTGTCCCTCC	TAATCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCC	AAAGAGGCCT	ATCAGGTGAT	TTAATAATAA	TTTAAACTA	CTATAGAAAC	60
TGCAGAGCAA	AGGAAGTGGC	TTAATGATCC	TGAAGGGATT	TCTTCTGATG	GTAGCTTTTG	120
TATTATCAAG	TAAGATTCTA	TTTTCAGTTG	TGTGTAAGCA	AGTTTTTTTT	TAGGTAGGA	180
GAAATACTTT	TCCATTGTTT	AACTGCAAAA	CAAGATGTTA	AGGTATGCTT	CAAAAATTTT	240
GTAAATTGTT	TATTTTAAAC	TTATCTGTTT	GTAAATTGTA	ACTGATTAAG	AATTGTGATA	300
GTTCAGCTTG	AATGTCTCTT	AGAGGGTGGG	CTTTTGTGTA	TGAGGGAGGG	GAAACTTTTT	360
TTTTTTCTAT	AGACTTTTTT	CAGATAACAT	CTTCTGAGTC	ATAACCAGCC	TGGCAGTATG	420
ATGGCCTAGA	TGCAGAGAAA	ACAGCTCCTT	GGTGAATTGA	TAAGTAAAGG	CAGAAAAGAT	480
TATATGTCAT	ACCTCCATTG	GGGAATAAGC	ATAACCCTGA	GATTCTTACT	ACTGATGAGA	540
ACATTATCTG	CATATGCCAA	AAAAATTTTA	AGCAAATGAA	AGCTACCAAT	TTAAAGTTAC	600
GGAATCACCT	CGAG					614

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GCGAAGACCA	TCAAATGAAT	TGTCACAATA	CTCGAATAAT	GCAAGACACA	GAAAAGGATG	60
ATAACAATAA	TGACGAATAT	GACAATTACG	ATGAACTGGT	GGCCAAGTCA	TTGTTAAACC	120
TCGGCAAAAT	CGCTGAGGAT	GCAGCCTACC	GGCCAGGAC	TGAGTCAGAA	ATGAACAGCA	180
ATACCTCCAA	TAGTCTGGAA	GACGATAGTG	ACAAAAACGA	AAACCTGGGT	CGGAAAAGTG	240
AGTTGAGTTT	AGACTTAGAC	AGTGATGTTG	TTAGAGAAAC	AGTGGGGCTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

GAATTCGGCC	TTCATGCTTA	CTCAGAAAGC	CACTGCCCCA	AACAAGCCAC	CTGCATTATC	60
AAACACAGAG	AAGAGGAATC	ATTCGCCTT	TTGGGGACCA	GAGAGTCAAA	TCATTCTGTT	120
GATGCCAGAT	AGTAGTTCCT	CAGGGAAGAA	CAGAAAAGAG	GAAAGTTATA	TATTTGAGTC	180
AAAGGGTGAT	GGAGGAGGAG	GGGAACACCC	AGCCCCAGAA	ACAGGTGCAG	TGCTACCCCT	240
GGCGCTGGGT	TTGGCTATCA	CTGCTCTGCT	GCTTCTCATG	GTTGCATGCC	GACTACGACT	300
GGTGATCCTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GCCCATTCGG	GCCCCCATCT	CACCCAAGAT	CCCCCAGAGT	CCAGGAGCTG	GACGGGGACA	60
CCCTCAGCCC	TCATAACAGA	TTCCAAGGAG	AGGGCACCCCT	CTTGTCCTTA	TCTTTGCCCC	120
TTGTGTCTGT	CTCACACACA	TCTGCTCCTC	AGCACGTCGG	TGTGGGGAGG	GGATTGCTCC	180
TTAAACCCCA	GGTGGCTGAC	CCTCCCCACC	CAGTCCAGGA	CATTTTAGGA	AAAAAAAAAT	240
GAAATGTGGG	GGGCTTCTCA	TCTCCCAAG	ATCCTCTTCC	GTTTCAGCCAG	ATGTTTCCTG	300
TATAAATGTT	TGGATCTGCC	TGTTATTTT	GGTGGGTGGT	CTTTCCTCCC	TCCCTACCA	360
CCCGTCCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GGAGCTAAAT TTAAGAAATG CAACTAGCCA GGTGCTAAGA AGCTCAGTTA CACGTTTCTC 60
 AAAAGTTGGC TGTTAGTTCC ATGACTCAGA GTGCACTCAA ATCATTTTAA TTAECTGAG 119

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC TTCATGGCCT AGGTCCTGTT TGCCTATTTG AGCTGCTATT AGTGTGAGAA 60
 GAAACTCAGA TGATAGTAGC AGAAACAGAA AGAGGAAGAG GCTACAAGAG ATGGTAGATG 120
 CTGAACTTAA GGCATTTGAT AACCAATGGA TATAGAAAGA AAAGGAAATG AAAGGACAAA 180
 AATGGCTCTA AGTTTTCAAA CTTGACTGAT GAGGAAAATA TTCACATCAA GAATGGACTG 240
 AAGAAATAAG GAGGAGATGC TGGGTTAGGG TGAAAGGAGA TGAGCCCAT TTTACATTGG 300
 AAAGCTCTAT GGAACAACGG AAGTAGTAGT AGCTTTATAT TCCAGTATGC CAAATTCTCA 360
 GCTCCAAGAC TCCAGCACTG TGTGCTCTAC AGTATGTTTT GTGATGTGCC TGAGTTTGG 420
 TTTCTTTATT TCAATTAGGG ACTCTTCATA CCAGGTCAG GGGTTATGCT CGAG 474

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

GAATTCGGCC TTCATGGCCT AGTTCCTGTG CTCTGAAAG AACAGTTGA TGCTTGTAAG 60
 GCTGTTTTGA TTATTTTGTAG GCGCATGATA ATCGAGCTTA CAATGAATAA AAAGACATGG 120
 GAACAGATGT TGCAATACT ACTCAGGATA ACAGAAGCTG TCATGCAGAA GCCAAAGGAT 180
 AAACAAATAA AGGACTTGTT TGCCAGAGC TTGGCAGGGT TACTATTTAG GACGCTCATG 240
 GTAGCTTGA TCCGAGCAAA CCTCTGTGTG TACATTTCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GAATTCGGCA CGAGGGGCCG CCGTTTTTTT TTTTTTTTTT TTTTCAGGTG CACATAAAGT 60
 TAGTTTATTA ATGACTATAT TTTGAAGCCA GCCATTTTGT CCAATATTTA AATAACAAGC 120
 TGTTTAATAT TAAAGCAGAA AGTACTGCCA CATTGTGACA GAAGTACAGC TTTATCCATA 180
 AACCTTCAC ACAATTATAC ATTAAATGCT ATTTTATTT AAGCAAGGCA CCCCTACTTG 240
 TTCTAAAATA TGGGATGTAC TACACCATGT ATTACTCGAG 280

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

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GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAACCA AGAATTCGGC ACGAGGGAAT      60
GAAATTAGCT AACAGCCTTC AGCTACAGAA ACTTTGGGAT CCAGACAGCA TTTGAGCTGA      120
CGCCACGCCC TTCTCAGGCA GCCCCACAG TGAAGGAGGA GGATCTAGAA GGGCCTGGCC      180
ATTTTTCCTC AATGTAGGGT CCCTCTGATG GGAATTCTTT GTCTGGAGAC CCGAGCTGAG      240
ACTTTGTCTC ATTGGCATCT CTGTCCCTGC TCAATGCTGC TTTCCATGCT CCCTTTTCTA      300
TCACAGACAT CATAGCCTGA AATCTTTCCA CACCCAATAC TGCTTCCTAT ACCCCTTAGC      360
CTTTCCTGAT CTCATTGAGG TTACCATTTT TCCTCCGTCG CTCGAG                      406

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(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

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GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGCTTT      60
TTTAGGTAAT TCTTTGTACT CCGTCTGTCT ACCTCTCCTC ACACCCAGC ACCCCCAATT      120
TTTTCAAACC TTGGTATCTG TTGGGTGAAC AGTATAATCT TTTTCATCTG TTTTAGAATG      180
TGGGATATTT CCAGTACCTA CTTTTTTTTT TTTTTTTTGC TGAATCCAAA GATATATAAA      240
TAAATATAT ATATTTTATA AAGATCAGAA TGATATAAAG GAGATACATG TTTCTTCCTT      300
TAAAAAATAA ACGGAAGTTA CATTGTTAAT GTTCATATTA TGATGCGAAT TCTCTGGTTC      360
CTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

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GAATTCGGCC TTCATGGCCT AGGATGTCTG AGGTCTTAAC CTGCCCAGTC CTGAATTCCT      60
GGGACTTCAA CGACTCTCTC TCTGCCAAAT GATGTGAGTC TTTAGGTAGA GTTATAGCGC      120
AAAGGGCTAC TATCAATGTT ATTAAGCATA AATTATGACT AGAGCCACAG AATGATTTC      180
TCATTAATCC AAAAAAAAAA AAAAAGCAAA CCACTCTTTT ACTTTATGAT GAGCACATAA      240
ACAGTTTTTT TTTCTTTTTA TTTATCTACT TTTACTTACT TAAATTTTAG AGATGGGGTC      300
TTGCTATGTT GCCCAGACTA GACTCAAACCT CCTGGGCTCA AGTGATCCTC TAGCCTCAGC      360
CTCCCAAGTA GCTGGGACTA CAGGAAGGAG CTACTGCACC TGAATCAATT TTTTTTTTTT      420

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CTGAGATGGA GTCTCACTCT GTGACCCAGG CTTGTCTCGA G

461

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC	TTCATGGCCT	ACATCAATAA	CAGCCAAACT	GAGACACATA	ATGTTTCTTA	60
CGTCCAAGAG	GCTAAATGTG	AGAATCCAGA	ATTTGAGAGA	AATGTGGAGA	ATACATCTTG	120
TTTCATGGTC	CCTGGTGTTC	TTCTGATAC	TTTGAACACA	GTCAGAATAA	GAGTCAAAAC	180
AAATAAGTTA	TGCTATGAGG	ATGACAAACT	CTGGAGTAAT	TGGAGCCAAG	AAATGAGTAT	240
AGGTAAGAAG	CGCAATTCCA	CACTCTACAT	AACCATGTTA	CTCATTGTTC	CAGTCATCGT	300
CGCAGGTGCA	ATCATAGTAC	TCCTGCTTTA	CCTAAAAAGG	CTCAAGATTA	TTATATTCCC	360
TCCAATTCCT	GATCCTGGCA	AGAATCTCGA				391

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC	TTCATGGCCT	ACGTGAAGAC	AAGATGAAGT	TCACAATTGT	CTTTGCTGGA	60
CTTCTTGAG	TCTTTCTAGC	TCCTGCCCTA	GCTAACTATA	ATATCAACGT	CAATGATGAC	120
AACAACAATG	CTGGAAGTGG	GCAGCAGTCA	GTGAGTGTCA	ACAATGAACA	CAATGTGGCC	180
AATGTTGACA	ATAACAACGG	ATGGGACTCC	TGGAATTCCA	TCTGGGATTA	TGGAATGGC	240
TTTGCTGCAA	CCAGACTCTT	TCAAAAGAAG	ACATGCATTG	TGCACAAAT	GAGCAAGGAA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCAAGG	CCACGCCGGA	GCTGTACCTT	GGAAGGAGGA	GCCAAAAATT	ATGCTGAGAG	60
TGATCACAGT	GAAGACGAGG	ACAATGACAA	CAATAGCCCC	ACCGCAGAGG	AGTCCACGAA	120
GAAGAATAAG	AAGAAACCAC	CGAAAAAATA	GTCTCGTTAT	GAAANGACAG	ATACCGGTGA	180
GATAACATCC	TACATCACTG	AAGATGATGT	GGTCTACAGA	CCAGGAGACT	GTGTGTATAT	240
CGAGAGTCGG	AGGCCAAACA	CACCGTATTT	CATCTGTAGC	ATTCAAGACT	TCAAACTGGT	300
AAGCGTTTTT	AATGTGCTGT	TCACTCTGCT	CTGTATTCTC	TCTTTTCCCA	GTTCCATTGG	360

CGCTCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC TTCATGGCCT AAAAACCTTA CAACTAAAGC AAATAGACTT TTCAAGAATT	60
TAAATAGGAT TCCTTCCCTT TAATCAATTA ATTATCCACT TTGTCATGGT GTCAACCTGT	120
AATTTTCATGG TTTTGTGTGT GTGTGTGTGT GTGACAGAAA TTTACAAACA ATGTGATCTC	180
GAG	183

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC TTCATGGCCT ACAACTAATT TGATCATATT AACAGAGGT TGGTTTTTAA	60
ACCAAGCAGT ATAAATATAA ATACAGCCTT GGGTAGATCA TAGTCAAACCT ATCCAAATGC	120
AACCTCAGCT TCAAAGATTG TAAAGTCTTT TCTTTCCCTT TTTCTCCTTT CCTTTTTTTT	180
TCCTCCAAAT ATTTATTTAC TACCTACCAT GTGCCAGGCA CTGTGATGGG CTATGAGGAT	240
GCAGTGGGG ATAGGACAGA TGCCATCCCT GCCCTGAGGA GACTTGCAGT TTATTGGAAA	300
AGATGGACAT CGTAAATAT ACAATCATAC AAATAAAAAAT TACATAAATA ATTCACTACT	360
TCAACTTGTG GGAGGTACAG CAGTTTATAA TAATAACATC CCTCCACCT TCTTGAGAGA	420
GTCATTGGTT GCCCCACTTC TCTTCATGAA TGAGAGGACA TGATTAAACC TATCATTTCA	480
GGTAGGAGTT TACTGTGGGA TGGATATCAA TCTTCTATTA ATATGTTTGT GCTCATGCTC	540
TCCATTTTGC AATGGACGTC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC TTCATGGCCT AAAATGAAAG CTATGTCTTA GAACCAATGA AAAGTGCAAC	60
CAACAGATAC AAACCTTCC CAGCGAAGAA GCTGAAAAGC GTCCGGGGAT CATGTGGATC	120
ACATCACAAC ACACCAAACC TCGCTGCAA GAATGTGTTT CCACCACCCT CTCAGACATG	180
GGCAAGAAGG CATAAAAGAG AGACCCTCAA GGCAACTAAG TATGTGGAGC TGGTGATCGT	240
GGCAGACAAC CGAGAGTTTC AGAGGCAAGG AAAAGATCTG GAAAAAGTCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGCTTCTGGT AATGGCGGAC TAGATGATTT AGAGCAACCC      60
ACCCATTGAA AAGAACTACA AAACGTCAGA TCTCTAAAAG GCTACAAAAT TAATACAATT      120
GTGAGGAATT GCTAGGTTAT ACTACAAGAG AACAGAAGCA TCCAGAGAGG TAAGCCTAGG      180
ACTTAAAACT ATATTTTAT TGAAGGTATC TGTGGTTGAG TAATAAGCCT GTGCTAAACT      240
GCGTGGAACT TATGGCAGAT TCAAGGCACT ATAGTAACAG AAGTCAGAGC CCAAGGCCCA      300
TCAAAGGGG TGGAGTGTTC CTGACAAAC CATCACCCAT AGTATGCTGG GAACCGCAAA      360
TGTTTATACC TTCAGGGTAA TTGTAATCAA AAAATATACT AGCCCTTACA AAGTCTTGTA      420
GCTTGGCTTT GCATCATCTG GGTGGACTAG TGAAGTGTAA GTTCTGAACA AATATTATGG      480
AGGCAACTCG AG                                     492

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(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC TTCATGGCCT ACTTCCCTGA GCTGGGGTTT CCCTGCTTGT CCAGTTGTGA      60
GCTGTCCTCG GTGTTACCGA GGCTGTGCCT AGAGAGTGGA GATTTTGTAT GAAAGGTGTG      120
CTCGCTCTCT GCGTCTATC TTCTCTCTCC TCCTTGTTCC TGCAAACCAC AAGATAAAGG      180
TAGTGGTGTG TCTCGACCCC ATCAGCCTCT CACCCACTCC CAGACACACA CAAGTCTCTCA      240
AAAGTTTCAG CTCGTTGTGT GAGATGTGCA GGTTTTCTCT AGGGGGTAGG GGGGAGCTAA      300
AATCGAATAT AACTTAAAT GAAAGTATAC TTTTATAAT TTTCTTTT AAAACTTGGT      360
GAAATTATTT CAGATACATA TTTTAGTGTC AAGGCAGATT AGTTATTTAG CCACCAAAAA      420
AAAGTATTGT GTACAATTTG GGCCTCAA TTTGACTCTG CCTCAAAAAA AAGAAATATA      480
TCCTATGCAT CTCGAG                                     496

```

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```

GAATTCGGCC TTCATGGCCT ACAAATTGA TTATGACAAG ATTGTCTACT ATGAAGCAGG      60
GATTATTCTA TGCTGTGTC TGGGCTGCT GTTTATTATT CTGATGCCTC TGGTGGGGTA      120
TTTCTTTTGT ATGTGTCGTT GCTGTAACAA ATGTGGTGGA GAAATGCACC AGCCACAGAA      180

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GGAAATGGG	CCCTTCCTGA	GGAAATGCTT	TGCAATCTCC	CTGTTGGTGA	TTGTATAAAT	240
AATAAGCATT	GGCATCTTCT	ATGGTTTTT	GGCAAATCAC	CAGGTAAGAA	CCCGGATCAA	300
AAGGAGTCGG	AAACTGGCAG	ATAGCAATT	CAAGGACTTG	CGAACTCTCT	TGAATGAAAC	360
TCCAGAGCAA	ATCAAATATA	TATTGGCCCA	GTACAACACT	ACCAAGCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GAATTCGGCC	TTCATGGCCT	AGTTAGGTGG	CTTTTAGTGT	ATTGACAAAG	TTGTGAACCC	60
ATTATCACAA	TCTAATTTTA	GAACATTTTT	ATCAGCCTCC	TTGCCCCCTA	AAAAAACCCA	120
GTACTTTTAA	CCAATCCAGT	CATTTAAAAC	TTACTACATA	TTTAATAGAT	GGATAGATAG	180
ACAGGAGGAT	GGACAGACTG	AAGGAAGAAT	GGATGATTAT	GTATAAATAA	ATGAAAAAAC	240
AAAAACTATC	CCCAAATCAT	AAGGGTATAC	GCAATGCTTT	CCTGTGGCAA	AAGATTCGGA	300
ACATGTACAG	CAGATTTTTT	TTCAAATGTT	CATAATTCTA	AATTCCCAAA	ATGGTCTACA	360
CAACTTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 575 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGAGAAAGG	AAGGGAAGCA	TTACTGGGTT	ACTATGCACT	60
TGCGACTGAT	TTCTTGGCTT	TTTATCATTT	TGAACCTTAT	GGAATACATC	GGCAGCCAAA	120
ACGCCTCCCG	GGGAAGGCGC	CAGCGAAGAA	TGCATCCTAA	CGTTAGTCAA	GGCTGCCAAG	180
GAGGCTGTGC	AACATGCTCA	GATTACAATG	GATGTTTGTC	ATGTAAGCCC	AGACTATTTT	240
TTGCTCTGGA	AAGAATTGGC	ATGAAGCAGA	TTGGAGTATG	TCTCTCTTCA	TGTCCAAGTG	300
GATATTATGG	AACTCGATAT	CCAGATATAA	ATAAGTGTA	AAAATGCAAA	GCTGACTGTG	360
ATACCTGTTT	CAACAAAAAT	TTCTGCACAA	AATGTAAAAG	TGGATTTTAC	TTACACCTTG	420
GAAAGTGCCT	TGACAATGTC	CCAGAAGGGT	TGGAAGCCAA	CAACCATACT	ATGGAGTGTG	480
TCAGTATTGT	GCACTGTGAG	GTCAGTGAAT	GGAATCCTTG	GAGTCCATGC	ACGAAGAAGG	540
GAAAAACATG	TGGCTTCAAA	AGAGGGGATC	TCGAG			575

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	AACAGGGTCT	TGCTCTGTCA	CCCGGGATGG	AGTGTAGTGG	60
CGCAATCACA	GCTCACTGCA	GACTCAGCCT	CCCAGGATCA	AGCAATTTCT	CCACCTCAGC	120
CTCCCAAGTA	GCTGGGACCA	CAGGTGCACA	CCATCATGCC	CAGCTAATTT	TTGTATTTT	180
TTGTAAAGAC	AGGTTTCACT	GTGTTACCCA	GGCTGATCTC	GAATCCCCGT	ACTCAAGCAA	240
CTCCCCACCT	CAGCCTCCCA	AAGTGCTGGG	ATTACAGAGC	TGAGCCACAG	CGCCGGGCCC	300
CAAAATCTAT	TTTAAATGTA	AAGAAACCCA	AAAGTAACAG	TTTGTAAAA	GAAAATTCAC	360
GTACTGTTTT	GTAGTAAAT	CTAAACACTG	TGTATCTTTG	TGTCTAGTTA	AATCCTAGGC	420
TTACAGCTAA	AATTCAATGA	GAAGGCAAGT	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:629:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	AGAAAGCTAT	CATTATTGA	GAGTTAATG	TATATTAAGT	60
ACCATGCTAA	GTGCTTTGTA	TGTATTATTT	ATCTTTATAA	AAATCCTATG	AAATGAATAC	120
TGTTATTTTC	CCCCATTATA	CAGATGAAGA	TAGAGAAAGG	AAGAAAAGGG	AGGGAAAGAG	180
GAATACCATT	TCACTGAGCA	ATTTTACTGA	AATATTTTAT	GGAGCATTG	TGGGTTTTGT	240
TIGTTTGCTT	GTTTGTGTTT	TTTGTGTTT	TTTTTTTTTG	AGACAGAGTC	TCACCTTTGTC	300
CCCCAGGCTG	GATCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:630:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 557 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

ACGGTGAAAC	CCTGTCTGTA	CTAAAAATAC	AAAAAATTAG	CGGGGCATGG	TGGTGGGCAA	60
CTGTAGTCCC	AGCTACTCGG	GAGGCTGAGG	CAGGAGAATG	GCATGAACCC	AGGAGGCGGA	120
GCTTGCACTG	AGCCGAGATC	ACGTCACTAC	ACTCCAGCCT	GGGCGACAGA	GCGAGACTCC	180
GTCTCAAAAA	AAGAAAAAAC	CAAGACAAAA	CCAAAAATAA	CTTGTCTCTG	TAAGTACAAT	240
ATCTGTGTTT	CTCAGGGACA	GTTTCTATTG	ACCATTGTTT	TTCTTGTGCA	TAGACTATCC	300
TTTCCTTTTT	TTGTACATCT	TGTAATTTTT	GTTTATTATA	AACTGGAATT	TTAAAAATAA	360
TGCAGTGTGG	CAACTCTACT	GCTTGATTG	GCTCAAAGGT	ATATTATTTA	TTTTTTAATA	420
TAACAAACCA	ATATTGGGT	TCTCTATTCT	ATAGTTTTAG	CATTTTGAAT	GCAACAACCTG	480
TCTTATTCAC	CATTTAATTC	TCAGTACTAC	CGTTTCTAGT	ACACAATATG	CACCTAATGA	540
ATATGAGGGT	CCTCGAG					557

(2) INFORMATION FOR SEQ ID NO:631:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GAATTCGGCC	TTCATGGCCT	AGACCGTGCC	AGGTATTGAG	AGCGACCCTC	ACATTCCTAC	60
AGTGCTCTGT	GTGGCATCTT	AATGAAACTT	TATTCTCTCC	CCTTAAATGA	GAAAGAATAG	120
CTAGTTGTCA	TCCTTTCTGA	ACCGATTTTG	TCTTTCAAAG	GTAGTAGTGT	ACCAGGCCTG	180
CTATTTTGCA	AAACGGTCTC	CACCAAATC	GAATTACCTG	CCTCGCGGGG	CAGGCGTGT	240
GACCAGGTGG	ACTCTAGAAG	TAGGTGGTTT	GCTTGGTTTC	TTTTCTTTT	AAGGTTTCCC	300
TTTCTTCTC	TTCTTTCTG	TGTTTTTTTT	TTTTTTTTT	TTTTTCAAT	ATAGAAACTG	360
TCCCTAAGAG	AGGAAACCTT	TCTGGCCATG	TTATTCCAGG	AATCTTTTGT	CCCCTAAGTT	420
TGACCTTGTT	CTTTCGTTCA	CCCTTTACTC	TTGCATCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAATTCGGCC	TTCATGGCCT	ACATAAAATC	AGTTGACTAT	TGTGCAACAT	AGAATTATTG	60
TTTGTGTGAA	ATTACCGCTG	AAGGACCTTG	CCTACATTCA	AGGGTCTATT	TTTATTTTTT	120
CAGGTATTCT	TTACATTAG	TGACATTATA	GTCTAGTACA	ACTGCTTGAT	AATTGGGAGA	180
AACTAACATT	AATTTTAGAT	AGTGATTGAT	AAAATTGGC	CTGCCAAATG	CATTTTAAAA	240
ATAATTCTAG	GATTATCTA	TGCTCATTTT	TAGTATACCT	CATGATATAT	AAGACATCTT	300
TCITTTGTCA	TATCAGTTCT	TCAGATACTA	AGACAGAGGT	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGCA	ATAATTATAA	ATGTTGCCAG	TCAATGCCAA	60
CCAGTGTCTG	ATTGGCTTCC	TGTGCATGTC	CAATTTCTCT	TGTGACACTG	TGTTGGTGCC	120
AGAGCTTCTG	AATCTTCTTG	AATCGCTCTT	TGCATAAATG	TAAAGGATTT	CCCCGTCTGA	180
GTCCCTGGTC	GGTCTCCCCA	TAATCATCAA	GGTAAGGAGG	AGAATAAAAA	CAGCCTTTGG	240
TTTGGCCAGC	TAAAAATAGC	ACCTGACATT	CCCGTACTCT	CAGGAAGATG	CCCACTCCAG	300
AGCCACAGGA	GTAGGTGTGA	GCTGTGCAGG	CTCCTACATC	CTCCCCCTCC	AGTTCAGTCT	360
GGCAGCAGTA	ACTCTGGGAG	CACAGCAGAG	ATCCGCACAC	AAGGCACAGA	GTTGGGGCTC	420
TGCTCTTATC	ACCACCTGAT	TTCGGGCACC	TCGAG			455

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

GCATGAAGGC CGGCCTTCAT GGCCTACAGG CTATGTACTG TATGATTCCA AATATGACAT      60
TCTGGAAAAG GCAAAACCAG GGACACAGTG AAAAGATCAG GGGTTGAGAG GGGAAAAAAG      120
GAGGGATGAG TAATCAGAAC ATACAAGATT TTTTAAAGGC AGTGGAACCG CTCTGTATAA      180
TACCATAATA GTGGATACGT GTCATTATGC ATTCATCCAA ACTCCTAGAA TGTACAGCAC      240
AAATAGTGAA CTGTAATGTA AATGCAGTGT GTAGGTGTTT ATACAAAAAA ACAGATGGAA      300
AGATTTTGTA CATAGCTCTA TGTGAAAATG TATTTATTTA TTAAGAGCAA AAATATGCTT      360
ATTTCAAATT TCCACGTACG ACTTTTTCAA AAAGACACGA TCCACTGAAA TAACCTCCCA      420
AAAGAATTTC TATAATCTAT AGCAGGTGTA CATGTTGTTA ATCAAGTGCT TAATGTTACT      480
CGAG                                                                 484

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCCACCAG AGGACAGACG TTGAAAGATA CCACGTCCAG      60
TTCTTCAGCA GACTCAACTA TCATGGACAT TCAGGTCCCG ACACGAGCCC CAGATGCAGT      120
CTACACAGAA CTCCAGCCCA CCTCTCCAAC CCCAACCTGG CCTCTAGTGA AAACACCACA      180
ACCCAGACC CAGACCCAGC AACTGGAAGG AACGGATGGG CCTCTAGTGA CAGATCCAGA      240
GACACACAAG AGCACCAAAG CAGCTCATCC CACTGATGAC ACCACGACGC TCTCTGAGAG      300
ACCATCCCCA AGCACAGACG TCCAGACAGA CCCCAGACC CTCAAGCCAT CTGGTTTCA      360
TGAGGATGAC CCCTTCTTCT ATGATGAACA CACCCTCCGG AAACGGGGGC TGTGTTGCGC      420
AGCTGTGCTG TTCATCACAG GCATCATCAT CCTCACCAGT GGCAAGTGCA GGCAGCAGTC      480
TCTCGAG                                                                 487

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GAATTCGGCC TTCATGGCCT AATTTTATTT AAATTTTAT ATTTATATAT TTTATTTAAA      60
ATTTTCATGA AATGGCCAAG CAGGGTTTAA TATAAAATGG AAACAGGGTT TATCTCAGAA      120
ATTTGGTGGC TAAATTCCTT GTATCCCGTC TTATCTAGGG ATGTTGTTTG TTTCAAGGTT      180
CTACCTTGAG AGGAGCCTGT CATTTCCTTT TTTGTGTGCT GCTTTCCTTA GTTGACATCT      240
TGGCTTTATG TGCTCCTGTT GAATGCATTG GGAAATTTTC TTTCTTCTT CTATGTCCTG      300
AAATAGCTTA TATAAGAGGG AAACCTCTCGA G                                                                 331

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 625 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```
GAATTCGGCC TTCATGGCCT ACAAAAATAC TTTCAATTTGT TTTGCTATTA CTAGTTTCTC      60
ATTTTTTATT GCACTTGCAA TCATTTTAGG AATATCCTCA AAATATGCTC CAGATGAAAA      120
TTGCCCAGAT CAAAATCCTC GTCTCAGGAA TTGGGATCCA GGACAAGATT CTGCAAAGCA      180
AGTTGTTATC AAGGAGGGGG ATATGCTCCG TCTGACCTCA GACGCCACCG TGCAATCTAT      240
AGTCATTGAG GATGGAGGAC TGCTTGATTT TGGGGACAAT AAAGATGGAT CCAGAAATAT      300
TACTTTGAGG ACTCATTACA TCCTGATCCA GGATGGTGGG GCGCTTCATA TTGGAGCAGA      360
AAAATGCCGC TATAAATCCA AAGCGACAAT TACCTTGAT GGCAAGTCAG ATGAAGGTGA      420
AAGTATGCCA ACATTTGGCA AAAAGTTTAT TGGTGTGGAA GCTGGCGGGA CACTGGAGTT      480
ACATGGGGCA CGGAAGGCAT CGTGGACGTT GTTGGCAAGG ACCCTGAATT CCTCAGGCTT      540
GCCGTTTGGG TCCTATACCT TTGAAAAGGA CTTTCCCGG GGCCTCAATG TGAGGGTCAT      600
TGACCAAGAC ACGGACGCTC TCGAG                                         625
```

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```
GAATTCGGCC TTCATGGCCT AGAGAACTTT TTGAGGGCTT TTTTITTTCC CCTTTTAAGC      60
TATTTTGTAT GTAGACTTAA TTTTCTAAT TTTGCCACTT CTGGCAATCT GAAATCATT      120
AAAAGGACAC AATTCAAATT TATGTTAAAG GTCATAAATT TTGCCCAGGA CTCATATATT      180
TCTCATTTTT CCAAAAATAA AATCTTATTT ATGCATTATA GCGACTTGGT TTTCACTTTA      240
TCTTGAATTA TAGCTTTTAA GAGGCAGAAA GAATCCTTTT TATAAGGACA GTCTCAAGTG      300
TACACACAGA TTAAATATTA CAAATATAGG TTGCAAATAA AACTTTCAAA ATGTGGGATT      360
ATAGGAAGCA AAAGAGAACC AACCAAAGCA TCAACAAATT TACCTTTTGT TTTTITTTAA      420
AGATTTTCT TATTTCTTA GCTGCTTTTG CATTAGCATT AAATAACATT CTTATTGGAG      480
TGGTATGTGC ATGGCCCAAG CTCGAG                                         506
```

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```
GAATTCGGCC TTCATGGCCT ACTCCAGCTT TATTATCTCA GCTACCATCA AACTATATTA      60
CATCAAATTA TCATCATTAC TCTCCTGCAC AGTAACTTTC TTTCTGTCC ACTAAGAAGC      120
TTACTCCCAT CCTGTTTATT CTCTATATCG TAGCTGGACT AATCTTTTCA AAGTGCAAAG      180
CCAATCACAA TACCACCTGC TTAATAATCCA TCAGTGGCTA ACTTTTCATT CTAGGACGAA      240
AAGAAAATTC TATAACATGA CTTCAAAGGC TCTGCATGTC CTTCTATTTT TCTTGTCTC      300
```

TCTAGTCTTT TCTTTGATGG TCTCCACTCC AGCCCTACTG GCTTCTTTCT GGAATCAATG 360
 TCACCCACAA CCCGTCACGC CACTCGAG 388

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT ACTCCGCTCT GGCCCAAGAG GAGGCCAAGA AGGACGAGCC 60
 CAAGAGCGGC GAGGAGGCGC TCATCATCCC CCCCAGCGCC GTCGCGGTGG ACTGCAAGGA 120
 CCCAGATGAT GTGGTACCAG TTGGCCAAAG AAGAGCCTGG TGTTGGTGCA TGTGCTTTGG 180
 ACTAGCATT ATGCTTGCAG GTGTTATTCT AGGAGGAGCA TACTTGACA AATATTTTGC 240
 ACTTCAACCA GATGACGTGT ACTACTGTGG AATAAAGTAC ATCAAAGATG ATGTCATCTT 300
 AAATGAGCCC TCTGCAGATG CCCCAGCTGC TCTCTACCAG ACAATTGAAG AAAATATTAA 360
 AATCTTTGAA GAAGAAGAGC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCGGCC TTCATGGCCT AGCAAGGAGA ACTATTGTCT TATGATCAGC TTTGCCATCT 60
 TTCTGTCTCT TATCATGTTG GTGGAGGTGG CCGCAGCCAT TGCTGGCTAT GTGTTTAGAG 120
 ATAAGGTGAT GTCAGAGTTT AATAACAAC TCCGGCAGCA GATGGAGAAT TACCCGAAAA 180
 ACAACCACAC TGCTTCGATC CTGGACAGGA TGCAGGCAGA TTTAAGTGC TGTGGGGCTG 240
 CTAACACAC AGATTGGGAG AAAATCCCTT CCATGTCGAA GAACCGAGTC CCCGACTCCT 300
 GCTGCATTAA TGTACTGTG GGCTGTGGA TTAATTTCAA CGAGAAGGCG ATCCATAAGG 360
 AGGGCTGTGT GGAGAAGATT GGGGGGCTCG AG 392

(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

GAGTTGAAGT GGCCAAAAA TTATAACACT CTCCTACTTT CATATCTTGA TTTTAATTTT 60
 TTCCCTTACT TGTATTTTAT TTCTGAGTGG CTAATGGATC TTAGTCTAAG AACTGGAGGT 120
 GGAGAACTCG AG 132

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```
GCACAAAGAC GCATTTTCATC TGAGTTTCCC TGAAAGCTAG AATAAGTTTG CTGGTGTGACG      60
CTGGGATCCT GTCTTCTATA GCTTTGTATC AAGCAAACCT AGCATTGTGT CTGGAATGCA      120
TGTCATGTGC AGCCTGCGTT TATGTGCGAC TGAGCACTTG GGTGGGGACA TCTTAAGGCT      180
GTTTATATTT CTTTTTCATG TGTTGTTGTT GTTGTGTTG TTGTTGTTTT GGAGAGAGTC      240
TCGCCCAAAG CTCGAG                                     256
```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```
GTGCTCGCAG CCNTGGTGGC CTGGCGCTCG GCGTNCCTTG TCTGCCTCGC TTTCTCCTTG      60
GCCACCCTGG TCCAGCGAGG ATCTGGGGAC TTTGATGATT TTAACCTGGA GGATGCAGTG      120
AAAGAACTT CCTCAGTAAA GCAGCCATGG GACCACACCA CCACCACCAC AACCAATAGG      180
CCAGGAACCA CCAGAGCTCC GGCAAAACCT CCAGGTAGTG GATTGGACTT GGCTGATGCT      240
TTGGATGATC AAGATGATGG CCGCAGGAAA CCGGGTATAG GAGGAAGAGA GAGATGGAAC      300
CATGTAACCA CCACGACCAA GAGGCCAGTA ACCACCAGAG CTCCAGCAA TACTTTAGGA      360
AATGATTTTG ACTTGGCTGA TGCCCTGGAT GATCGAAATG ATCGAGATGA TGGCCGACGG      420
AAACCAATTG CTGGAGGATG GCTCGAG                                     447
```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```
GCTCAGCAAC ATTTTAGGAA CAACATTGGT GAGTATATGA GAATAGCCGT GACCTCCATA      60
TTTCATCAGC CGGGTTTTTCG TATGTATGTC ATGTGCTACC AGAATTCGAT CTTACAGACC      120
CTCTTCCACC AGGAGACGCA CCTGTGAAA AATGTTAACT CATTAGATGT CATTTGTCTT      180
TCATTTTCGC TTTTCAGGAT GCTTTCAACT TTTTACTCAT TAACCTATTG TGCTTGTCGT      240
AAAGATACTG ACTTCTACTG TGGCGTGTGT ACTGAGAGAC TCGAG                                     285
```

(2) INFORMATION FOR SEQ ID NO:646:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

GGAGATTGA AGAAGAATTG AATGAAAGGA TGATTCAAGC AATTGATGGG ATTAATGCAC	60
AGAAGCAATG GCTCAAGTCT GAAGACATTC AGAGAATCTC ACTGCTTTTC TATAACAAAG	120
TACTAGAAAA AGAGTACCGG GCCACGGCAC TGCCACGCTT CAAGTATTAT GTGACTTGTG	180
CCTGTCTCAT ATTCTTCTGC ATCTTCATTG TGCAGATTCT CGTGCTGCCA AAAACGTCTG	240
TCCCGGGCTA TCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:647:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

GGGGCAGCAG TAAATCCAG GCCCGAATGG AACAGCAGCC CACTCGTCCT CCACAGACGT	60
CACAGCCACC ACCACCTCCA CCACCTATGC CATTGAGAGC TCCAACGAAG CCTCCAGTTG	120
GACCCAAAAC TTCTCCCTTG AAAGATAACC CGTCACCTGA ACCTCAGTTG GATGACATCA	180
AAAGAGAGCT GAGGGCTGAA GTTGACATTA TTGAACAAAT GAGCAGCAGC AGTGGGAGCA	240
GCTCTTCAGA CTCTGAGAGC TCTTCGGGAA GTGATGACGA TAGCTCCAGA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

GTGCANATGT ACGGTGACCA CCTGGCCCTT GACCGGGCGG CTCGAACCTG GCGGCCCTGG	60
GACCAGCGTC TTCTTCCTCA ACAGCCCGTT CCCGAGAATG TCCAGCCACT CTTCTGGGGC	120
CGGGGCTGGG GCGGGCTCGG GCTCCATGGC AGCAAGGAAC TCTCGGGCCA GGGCCCCAGG	180
CTGCTCANCC TCCTCCGCCG GGGGTGTGCC CATGTCCTCC AGCGGTGGCA GCTCACTCAG	240
GTGATCCTCT TCCTCCTCTT CCTCCTCCTC TTCCTCCTCA CCCTCTGCAT CCTCAACCCC	300
ATCCAGTACC TCGAAGTCCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT ACTTCCTGAT ACAGATACAT TTACTACAGA AAATTCCTT      60
TATAGGTGTA AATTTCTGTT TACAACAGGC GAGTCGAAAA ATAATAAGAA CAAAAGGAAA      120
AAAAGCAGTC ATACTTTATT TTAGGCAGTT GAGGGGTAGC TGAATAAGTT ATCCTGTGTT      180
GTTTGGTTCT GTTACTTATA GCTCAAAGTC ATCAATATGC CAGGGTGGCA TGTTCGGGA      240
TGGTGCAATC TTGTCTTTTG CAGTCATTTA TCAGGGTGGC GTTCCTAAA TTCTAACACA      300
GACCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GGTGAGGCCT GCTTCACATC TCTAATGAAC ACCCTCATGA CGTCGCTACC AGCACTAGTG      60
CAGCAACAGG GAAGGCTGCT TCTGGCTGCT AATGTGGCCA CCCTGGGGCT CCTCATGGCC      120
CGGCTCCTTA GCACCTCTCC AGCTCTTCAG GGAACACCAG CATCCCGAGG GTTCTTCGCA      180
GCTGCCATCC TCTTCTATC ACAGTCCAC GTGGCGCGGG CCACCCCGGG CTCAGACCAG      240
GCAGTGCTAG CCCTGTCCCC TGAGTATGAG GGCATCTGGG CCGACCTGCA GGAGCTCTGG      300
TTCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GCAAGGGCAG GCGGGTCCCC CAGTCCCGCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG      60
CAGGGCTCCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTTGT CAGACCGTCT      120
GCGTGTGGCA TTTTTTGGCT TATAAGCTTC ACCCACTCAC CCCCACCCA CACCCACAT      180
CCCCCTGCCG GCAGCCCCTC AACCTAAGAA GGCCAGAGCA TATTTATTTT CGGAGGGAGC      240
AGATTACTTC TCCCAGAGAA AGGAAAATCT TGGAAAAGAT TAAAAACAC AAATCTAAGC      300
CTTGACGGTT TTTTTTCCC TTTTGACCCC CTTCCCATCT CTTCAGAATT TATTCCTG      360
GCTTTTTTTT TTCTTGTGCG TGTTCTCGAG                                     390

```

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```
GAATTCGGCC TTCATGGCCT ACCAAATTCC CTGCCTGTGC CTGCTGGGAC CAGACTCCGC      60
TGTCATGAGG GTGACATCCG CCACCTGTGC TCTTCTGCTG GCTCTGATCT GCAGCGTCCA      120
GCTGGGGGAT GCTGCGCTGG ATATCGATAA ACTGCTTGCG AATGTTGTGT TTGATGTGTC      180
CCAAGACCTC CTGAAGGAGG AGCTTGCTCG TTACAACCCC AGTCCCCTGA CAGAGGAGTC      240
CTTCCTCAAT GTCCAGCAAT GCTTTGCCAA TGTCTCGAG                                280
```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```
GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT      60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAACTTGC      120
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT      180
GCAGATTGAC TGAAGAGAG TTGAAAAAGA TGTAAATAAA GCAAAAAGAC AGATTAAGAA      240
ACGAGCTCTC GAG                                                                253
```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```
GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGG GTGAGCCACC GCACCCAGCC TGTGAAATAC TATTTTATG GTAAGCTAGA      120
ATTTTAAAC TATTTCTTGC AAGTTTAGGA TTAAATGAAT TACATTATGT AAAATTACAT      180
CTTTGTCTGT ATTACGTATT TGTATACAGT TGAATAGTTT TGGTAACACG TACCTTAGTG      240
CTTTACATTG ATTGGCTCAT TAATTTTATA TTTTGAGTAA TAATCATCTA ATTTTATTAT      300
TGTACAATTC AGTCTTAAAT TATGTTATGA TGTGAAAATG GTAGCTTTCT TGAGTGTATT      360
TATTTTGTGTA GTAGTGGGCA ATGTAATTAT CACACATAAA ATGAACTGTG AGACTTTTGA      420
GCCTGAAATA TTATTCATAT TATAATGCTC CTCGAG                                456
```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

GAATTCGGCC	TTCATGGCCT	AGTATATACA	TGCATTTAAT	TGTGATTTTA	TCACCTTTCC	60
CATTTCTTTC	CCCACAAGCT	GGCATTTCAG	TAGTTGCTTT	TGAATAATGG	TTTGGGTTAC	120
CTGGGAAGGC	AGGCCAGAA	CCCATTTCCCT	TGACTTGCCAG	TTCCGGGCTG	TGTTACATG	180
ACTGCTGTCT	AGCTGATGCA	TTTTTCACAT	TTGTCAACTC	TGGTTAGAAA	CAGGTCCTCA	240
GGAGTATTCT	CTAACCTGAT	ATTTTCTAAA	AAGATATGTT	GATTCAACTT	TGTTTAGCAT	300
CCTACTTTCT	AGATTGTGGG	GCTCATTTTG	CCAGGGCCAA	GCTACCAGAA	AAGTAGAAGT	360
GGAGATTACC	TGGTATGTAT	CTCTCTGGGT	GCCCCAGTTA	GAGCTGCCAC	AGCTCAGGAA	420
AAAGATGAGG	CATAACGACC	TTGAATGTAA	TTGGAGTAAG	TGACAAAATA	AGAACTACCC	480
TGGGAAACTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:656:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

GAATTCGGCC	TTCATGGCCT	ACTTGGCCTT	TGTTTGTGTT	TGCCTTTGTC	AGTCTCCTGC	60
CTCTGGATGG	GTTTCTGTTT	GTTTCCAAAC	TGCTGGGGC	TGTGCACCAT	GGAGACAGTG	120
TCCTGGGCTG	CCTCTAGCCT	GATCTGGTTA	GAATAAGCCC	CTCTCCTTTG	CATGCGTCTC	180
CAACCTGACA	TTTGGAGCAT	CCAAAACAAA	TCATGACATT	CCCAAGTAAA	GATAGAAACC	240
ACCGTCTCCA	CTCCACTCGA	G				261

(2) INFORMATION FOR SEQ ID NO:657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

GAATTCGGCC	TTCATGGCCT	AGATGGTCTC	TGCTGCTCTT	GCCTCTAGTT	CATGGAGATG	60
TGCTCTGTT	CAGGCCAAGA	TACAGCCAGC	CAGGCCTGTC	GTCTGGGACC	CAGGAGGCCT	120
CTGATGACCA	AGGGCTTTCA	CATCCTAAGT	CATTTGGAAG	GAGGCCTTGA	GAACAAAGTC	180
ACCTTTGTCA	CTCCCAGTGA	ACTGAATGAG	GAACATGCTG	TCTCCTGTCT	TGGCCTCCCC	240
TTTCATGAGA	TACTGGGGAG	AAGAGAACAT	TCCTCCTGGC	TTAGTTGTAG	CAGACCCAGA	300
CCTGTGCCCC	GCTTTGTGCC	CCCTTCCCAA	CTTCTGAAGC	ACGTGCTGCA	GAGCCACCTT	360
GGTCTGAGCA	CCTGAGGACC	AGCCCCCTCT	CCCTCAGTGC	GGGTCATCTC	TTGGGGGATT	420
TTCTTAAAGT	GAAGAAAGGG	GGTGGGGAAC	CATATTGCCC	CTCCCTCCCC	CATCAAACCT	480
CCTTCATTTA	ACTTGCTATA	AAATGAGTCA	TATAAAGAAA	CTCTATATGG	GTGAGGTATA	540
TCCCACTTCT	GTGAAACAT	TACAAATCAA	ACCGCTTCTC	TCAGTTTATT	TAAGATGCTT	600
TTGTTGCAAG	CGGTACTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```
GAAGTCTTGG AGATTCTAG TTTATTCATT AACAGCAGAA GGATGGAAGA AAATTCCTCT    60
GGCAATACCA TGTCAGCCTC TTCGATGTTT AATACAGAAG AAAGAAAATG TTTGCAGACT    120
CACAGAGTCA CGGTGCATGG GGTCCCAGGG CCAGAGCCCT TTACCGTTTT CACTATTAAT    180
GGAGGCACCA AGGCAAAGCA GCTTCTGCAG CAAATTCTGA CAAATGAACA AGACATCAAA    240
CCTGTTACCA CAGACTATTT TTTGATGGAA GAAAAATATT TTATATCTAA AGAAAAGAAT    300
GAATGTAGGA AACAACCATT CCAGAGAGCC ATTGGTCCAG AAGAGGAGAT CATGCAAATT    360
TTAAGCAGCT GGTTCACAGA AGAGGGATAC ATGGGCAGGA TTGCTTAAA AACCCAGCAG    420
GAAAACCTAG AAGAGAAAAA CATTGTTCAA GATGACAAAG AGGTGATCTT GAGCTCAGAG    480
GAGGAGAGTT TCTTTGTCCA AGTGCATGAT GTTCTCCAG AGCAACCTCG AACAGTCATC    540
AAAGCACCCC GCGCCAGCAC ACTCGAG                                     567
```

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

```
GAATTCGGCC TTCATGGCCT AGGCCCTTTG GCCCTGGGGT GGGGGTGCTT ACTACATCCC    60
TGGAAGGTGC AGGGAGGCTG ATGGCCTTGA TCTCTAACAC AAACAGGAAC CAGCTTCCTC    120
CCTCCCCCAC CCTGGGTTC CAGGGCCTCC GGGTGTGAGA TCCTCCCCCA CTGCAGTGCC    180
CCACCCGCTC CCCACAGAAG CCCGAGAGT GGCTCTGTCA CCAGAGGTGT CATTTCACAG    240
CTGTCTGTGG GAGGTGAGTG AGCAGGGAAT GTGTGTGCTG GGTGTGGGAA CTCAGCCCCA    300
TCTAAGAGAA GATACTCTTG GCTTCTCTCC CCTCAGAGGA GCAGCCGCGT CCCTGGTCTC    360
TGTCACCTGA CAGTCCCAGG GTCTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 491 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

```
GAATTCGGCC TTCATGGCCT AGCCAGGAGT TGAGGTGGAA GTCACCATTG CAGATGCTTA    60
AGTCAACTAT TTTAATAAAT TGATGACCAG TTGTAACTT CTGTTGGTTT TTATTCAGAA    120
TACTGGCAGA TTTTAGGAAT ATAAAGGTGT ACTATGAGAC TTCCACTTTT CAGGTGGAAT    180
ATATGGGTAT CTTAGAGTGG TCTATCCTGT TTTCGTTGTC GTTTGAGTCA TTTGAAAACT    240
GGATTCGGTT AACTACATAA TATGTGAGAC CTGACTGGTT TTATTGGACA CTGGCAGTTT    300
ATAACTTTGG CATACTCTAG ATAAATTCTG ATTGGTATGG GGTGTTAAGG TTTCTGGGGC    360
GTTTGTAATG CACACCCATG GTTGAGAACC TAGTGCGCTA GTAGGCACGT GTTAAAAAGC    420
TAGTAACTAA TATTTTAAAT TTAACCAAGT TTAACGTCCT TAAAAAAGGA TTAAGTGCCA    480
AGGACCTCGA G                                     491
```

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT ACCTCAATAT GCTATCAGAT TCTGAAAATT CCCAGCATCT    60
GGAACCTTCAT GAGCCACCAA AAGCTGTGGA TAAGGCGAAA TCCCAGGGG TTGATCCTAA    120
GCAGTTGGCA GCAGAACTCC AGAAGGTTTC ACTACAGCAG TCACCGCTGG TTCTGTCATC    180
AGTTGTTGAA AAAGGATCTC ATGTTTCATTC AGGTCCTACA TCAGCAGGAT CCAGTTCCTG    240
TCCCAGCCCT GGGCAACCAG GGTCCCCCTC AGTGAGCAAA AAGAAGCACG GCAGCAGCAA    300
GCCACTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCCTAT GGCCTACTTC CGGCGCAAGT GGCTTCTGAT AATCATGGCG CCCCTCGGAA    60
CAACTGTATT GCTGTGGAGC CTCTTGAGGA GTTCTCCGGG CGTGGAAACGG GTCTGTTTCC    120
GGGCTCGAAT CCAGCCCTGG CACGGTGGCC TGCTCCAACC GCTACCTTGC TCTTTCGAGA    180
TGGGGCTGCC ACGCCGCCGG TTCAGCTCCG AGGCCGCAGA ATCTGGTAGC CCAGAGACCA    240
AGAAACCTAC ATTTATGGAT GAGGAAGTTC AAAGCATACT CACGAAAATG ACAGGCTTGA    300
ACTTGCAGAA GACTTTTAAG CCAGCTATAC AAGAACTGAA GCCACCAACC TATAAGCTAA    360
TGA CTCAGGC ACAGTTGGAA GAGGCTACAA TACAGGCTCT CGAG                                404

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGCCTA ATTTGTGTGA TGGCCAAAGA GTTCTTATCA GAAGTGGCAA    60
AAACTACATA CAGGTTGGCT TCCAATAACA TGAGCCAGGT ATTTTTCAGT AATATTTTGA    120
AGTGTCTTTT CTTTCTAGAC ATGCACATGA TGGTGTCCAA GCCAGAACAG TGGGTAAGAGC    180
CAATGGCTGT AGCAGGAGCC AATCAGTACA CCTTTCATCT CGAG                                224

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

```
GAATTCGGCC TTCATGGCCT AGGTCTACCA AAGTGAGGAC ATTACTGCAG ATATTCTTCT    60
CCTTTTCTCC TACATTATCA TTTCTCTTTT ATAACATCAT TTCTGCAGAT ATGTA AAAAT    120
ACATCCCATC TTCAAAAAGA AAAACAAAAA TCTGACTGTA CTTCATATCC CCTTCTAGAC    180
ATTGCCACAT TTCTCTACTT CTGTTTACAA CAAAACTCCT GGAAAGATTT GTCTATACTG    240
GCTTTCTCTA CTTCTTTTAC TTCCATTCCCT TTCCTAACCA CTCTAAACAT GCTTGGGTCC    300
CCACCACTGT AACAAATATA ATTTGTGTCC AATAACCAGT GATCTCTGTA TCACCGGTTC    360
CAAGGGTGAG ATCTCAGACT TCACCTTTCT GGATTGATTG ACACATTGGA CTCAGTTGGT    420
TACTCCTCAC TTCTTGAAAC TGTCTTCACT GGGCTTTTGT GACTCCATAT CTCGAG      476
```

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

```
GAATTCGGCC TTCATGGCCT ACTCTCTACT CCTTTGTGCT CAATTTCAT TGTGGAATTC    60
TGCATATATG ATCTTGTGGC ACATTCTAC ATTTCTCAG CCCAGAAGGC CTTCCTGTG    120
CACTATCTCC TTCTTTTAC TAACTCTTAC TATATTCCA GGCACAGTTC AGGCATCAGA    180
TAGCCCTATT TGTTCCAAC TTCACCGTAG GTCAGATTAT AAGCCTTGCA ATCTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

```
GAATTCGGCC TTCATGGCCT AGACCATTTT CATTGTTTAT AGTTTATTTT TTATAAATAG    60
TGCTTTCTGG AATATCCTTA AATACCTCTA TCTTTTAAAC ATCCTTGTGT ATACATCTTT    120
TCTCACAATT GGCTTCTCT TGAATAGAA TCTCCTGGAA ATTAGATAGC TGAGGTA AAA    180
GTCCCTGAAC CTTTACAAA TTGCTACACA ATAAATACCA AACTGATTTT CAGGAATGTA    240
GTCCCATCAA CAGTGTGCTT GTTTATCCAT ATCGTTGCTG ATCTGAGTTT TGTCACTCTA    300
TTGATTCCTA CCAATCTGCC AGTATCATAG ATTTTAAAAT ATTTTGTG TGCACTCGA    360
G                                     361
```

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```
GAATTCGGCC TTCATGGCCT ACTCATACAC AATGAATACA AAAACTGGAA CTCTGCAATT      60
TAATACTGTT TCCAACTGG AACTTGGAGA ATATTCTGT GAAGCCCGCA ATTCTGTTGG      120
ATATCGCAGG TGTCCTGGGA AACGAATGCA AGTAGATGAT CTCAACATAA GTGGCATCAT      180
AGCAGCCGTA GTAGTTGTGG CCTTAGTGAT TTCCGTTTGT GGCCTTGGTG TATGCTATGC      240
TCAGAGGAAA GGCTACTTTT CAAAAGAAAC CTCCTTCCAG AAGAGTAATT CTTATCTAA      300
AGCCACGACA ATGAGTGAAT ATGATTTCAA GCACACCCTC GAG                          343
```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 266 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```
GAATTCGGCC TTATCCTACA ACTTTGAATA GACATAAGAG TGCCTGTCTG CATAAACCTT      60
CATCAACATT GGTATTATCT TTCTTTTCA TCTTTGCTAA TTGGATAAGT TTTAAAAAGT      120
GTAACACATT TTAGTTTGCA TAGCTTTGAT TATAAGTGAG GTTCGACATT TTTTTCATT      180
TCTTTACACT TTAAAAAATC TAACCGTGGC AACGTTTGCA GGTGTGTGTT CTCTTATGT      240
TGCTGAGTGT TATTTACTCC TGGACC                          266
```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 452 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```
GAATTCGGCT TCATGGCCTA CAAAAAGAA ATTAAGAAGC TCCTAAAGAC GCAAAGAAAT      60
CATCTACTCC TCTGTCTGAA GCAAAAAAAC CAGCTGCTTT AAAACCAAAA GTACCCAAGA      120
AGGAAGAGTC TGTCAAGAAA GATTCTGTTG CTGCCGGAAG GCCAAGGAG AAGGGGAAAA      180
TAAAAGTCAT TAAGAAGGAA GGCAAGGCCG CAGAGGCTGT CGCTGCAGCT GTCGGCACTG      240
GAGCCACCAC AGCAGCTGTC ATGGCGGCAG CTGGAATAGC AGCCATTGGC CCTGCCAAG      300
AACTCGAAGC TGAGAGGTCC CTTATGTCAT CTCCTGAGGA TCTAACCAAG GACTTTGAAG      360
AGTTAAAGGC TGAAGAGGTC GATGTAACAA AGGACATCAA GCCTCAGCTG GAGCTAATCG      420
AAGACGAAGA GAAACTGAAG GAAAACTCG AG                          452
```

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 284 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: dcuble
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

GAATAATTGA CTGAAAGTGT AGTGTGCGAGT GGTAGAATAA GTGCTGATCC TGGGGTCTTA	60
TACCAATGTT GCTAACTGTG AGCAGCCTTT GTCAAATCAC TTGGCTTCAT TTTCAGTGGC	120
CTAAGAGTAA TAGGTTTAAT TATTTCCATA ATTCTTTAA GTTTTTACAT TTTCTGAGTT	180
CATCTTTTGT GTTTTTCCTG GCATTTTACT ATTCCTCTTT CCTGCTTTTG GCTATTTTCT	240
CAACAGGTCC ACGACTGGAA TTTGAAAGCA AGAAACATCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 235 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

GAATTCTGGA AGCAGCCTAT CATCGCTCCG TCTGCCCTCC ATACACAGCG TTTGTGTGTG	60
TTATGCCAAA CTGCTTGGTG TTTTCCAACC GTGGACCATG ATATCTCACT TCCTTAACCT	120
TACCTTCATA TGCTTTTCCT TTGTGTCTTC TTCTGAAATG CTTCCTTCCT TTGTCCAGGC	180
TGACTCCTGT TTGTCTGAGA CATGTGTCTC AGGAAGCCTT TCCGTTCCCC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

GAATTCGGCC TTCATGGCCT AGCATTGATG GCCCATGTAG AAGACCTGAT CATTAAAGACT	60
ATAATCTCTG CTGAACTAGC TATTGCTACT GCCTGTAAAA CCTTGTTTCC TCATCGCAGC	120
AGTTGTTTGG AACTCTATGG CTTTGACGTG CTCATAGATT CTA CTCTGAA GCCATGGTTG	180
TTGGAAGTGA ATCTCTCTCC TTCTTTGGCC TGTGATGCGC CTCTGGACCT AAAGATTAAA	240
GCCAGTATGA TTTCAGATAT GTTCACTGTT GTAGGATTG TGTGCCAAGA TCCTGCCCAG	300
CGGGCATCAA CTCGGCCAAT TTATCCACCC TTTGAGTCTT CCAGGCGAAA CCCTTTCCAG	360
AAACCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 295 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC	TTCATGGCCT	ACACAGACAT	CATCATGCAG	AAGATGACCA	TTTCCAACAT	60
GGAGGCAGAT	ATGAATAGAC	TCCTCAAGCA	ACGGGAGGAA	CTCACAAAAA	GACGAGAGAA	120
ACTTTCAAAA	AGAAGGGAGA	AGATAGTCAA	GGAGAATGGA	GAGGGAGATA	AAAATGTGGC	180
TAATATCAAT	GAAGAGATGG	AGTCACTGAC	TGCTAATATC	GATTACATCA	ATGACAGTAT	240
TTCTGATTGT	CAGGCCAACA	TAATGCAGAT	GGAAGAAGCA	AAGGAAGTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTCGGCT	TCATGGCCTA	CCTGCCTCGA	GTGATGGGTA	TCGGGATGGG	TATCGGGATG	60
GCCACGCGG	GGATATGGAT	CGATATGGTG	GCCGGGATCG	CTATGATGAC	CGAGGCAGCA	120
GAGACTATGA	TAGAGGCTAT	GACTCCCA	CTCGAG			156

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	TTCATGGCCT	AATAATTTGT	AAGTTAAAT	AAGTAATACA	AATTAATGC	60
AAATCAAATG	CCTGAAGAAG	AAGCACGAAT	ACCTATTTTG	AAATCTGCTG	TAGCCGAGAC	120
AGCTTCTAAA	TCTCCCACTT	GGGTTCTGTT	TCTGGAAGGT	GTGGGTCTTG	TGGTAGCTGG	180
AGTGTGGTG	GCCATCTTGG	TGCTGGCGGT	CCTCATGCTG	ATGTACTACT	GCTGCAGACA	240
GAACAACAAA	CTTGCCAAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCCTGGA	TCAAAACAGA	GGAAAATGGT	GGGAATTCTT	GTATAGATAC	AGTCTAACAT	60
AGAAACCCAT	GCCCATCAGC	AGTAATTTC	AGTCCCCCAG	TCCTCCAAGC	CCTGGTACTC	120
GAG						123

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GAATTCAGAG ATAAAGCTAA AGTTCATTT GAGCACCAGC CCAAATCCTG GACTTCTTTC      60
TGCTCCTCCT CAGAGGTTCT CTGGTTATAA GTTTTATGTG TATCTTGCCA GAATTTTTC      120
TATGTTATTA ATACAAATAT ATGTAGCCAC AGAAATTATA GCGTGTCATT CAGCCTTTGG      180
TTTATTGTC ATTGATAGTA TTATGTCCAT ATCACTCTAC AACTTCTTAG GCCATGAAGG      240
CCG                                     243

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACC ACCTATGGAA GCCAAGTGTT CCCGGGCCAT      60
GAGACCTGCC CAATCAAGCA GAAACACATT TGGAGAGACA AACAATCAGC ACACGCTCGA      120
G                                     121

```

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

```

GAATTCTAGA CCTGCCTCGA GTACCTGATC TTTTACTGTC TCTATAGGTT CATCTTTTTC      60
TTCCCTTTGT TAATTCTACT TTTTAGTTTT TTTGCTAGAT TTTTCTTGCA ATTGGATAGG      120
CCCATTTAAC CTATTTTGCC TCCACTCTAA ATTCAGTACT CCAAGAATTG GTTCACTCT      180
TCCAAATTTT GTATATAAGC CAGAGTTCTG CATAAAGGAA AATACTTAAA TTCTTTCTAA      240
TCTAATGTGG TTTCTGTCAT CTTTCAGGAA ACTTTTCCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

```

GAATTCGGCC TTCATGGCCT AGGGTTTGTG GCTAAAAATT ATGCTTAAGA ACACATCTAA      60
CAAACCTAAA GCTGCAAAGA CATAATGTTA ATGTAGGTGA AAATTTCCTT TGTGTTTATT      120
CTGATAGACA AAATTGTATT TTAGATGAGA AGCAACAATT TTCATGTTGT ACTGAGATTG      180
TTAGTAATGA AATACTTCCA AATATTAGTG ATGGTAGAAA TCTAGTGTAG GGCTCTTTGC      240
TGAGAAGGGA AAAAAGTCAC ATAAGAAATC TACTTTTCAG TAAACTGCAA ATATGTGTGC      300
TTCAACCTAT AACATATTCT GTCACCTTGA GCTTGTGATA TTGACAGAGA ATGAAAACCT      360
GATAAGACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

```

GAATTCGGCC TTCATGGCCT AGAGCGACTT CGACACCATG CCAGACATTG AGAGTGATAA      60
AAACATCATC CGGACCAAGA TGTTCTTTA CCTGTCAGAT TTGTCCAGGA AGGACCGGAG      120
AATTGTCAGC AAAAAATATA AAATTTATTT TTGGAACATC ATCACCATTG CTGTGTTTTA      180
CGCGCTGCCC GTGATCCAGC TGGTCATTAC CTATCAGACA GTAAGTGCTA AACCTAGCCC      240
CAAACCCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT AATCGAGGAG AATGGAGACC AAACCTGTGA TAACCTGTCT      60
CAAAACCCCTC CTCATCATCT ACTCCTTCGT CTTCTGGATC ACTGGGGTGA TCCTGCTGGC      120
TGTTGGAGTC TGGGGCAAAC TTACTCTGGG CACCTATATC TCCCTTATTG CCGAGAATC      180
CACAAATGCT CCCTATGTGC TCATCGGAAC TGGCAACCACT ATTGTTGTCT TTGGCCTGTT      240
TGGATGCTTT GCTACATGTC GTGGTAGCCC ATGGATGCTG AAACCTGTATG CCATGTTTCT      300
GTCCCTGGTG TTCCTGGCTG AGCTCGTAGC TGGCATTCA GGGTTTGTGT TTCGTCATGA      360
GATCAAGGAC ACCTTCCTGA GGACTTACAC GGACGCTATG CAGACTTACA ATGGCAATGA      420
TGAGAGAATG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```
GAATTCGGCC TTCATGGCCT AGTCCCCACT TTATCTCTTT AAACGGTTTC TTTTCTCTT    60
TTTTTTTTTA GACCTCTCAG GGATGAAACA TTTTATTTT TAACTAGTT TTTTCTTAA    120
ATAACATTAA CACATGCTGA ATGCTTAAAT CTTTCTAGAA TTCAGAAAGG TAAATGAAA    180
GTCACCATTC TCATTCTCAT CATCTTACTC CCAGAGATGA TTGTTATTAA TATTCCAGA    240
AATTTGCTT GTATATGCAA ACAGCAATAT ATTGTAGCTG CTCGAG                286
```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```
GAATTCGGCC TTCATGGCCT ACCCTTACCA GATACTGAAT CTGCCAGTGC CTTATTTTGG    60
ACTTCTCAGC CTCCTGGGCT GGGTGAGGTG GTTCACTACC AGCCTTGGCA CCATAGTGAG    120
ACTCCCATCT CTACAAAAA AAAAAAAAAA AAACCTTCTG TTGTTTGTA GCTACCCAGT    180
TTATGGTATT TTGTACAGC AACCCAAACA GTCTGAGACG TTAGCTTAA CTCCTGTATG    240
CACTAGATAC AGTCTGCACT TTGACATCAA TCTCGA                276
```

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```
GAATTCGGCC TTCATGGCCT ACTAAGAATA GGAAAAAAAA TAACACTATG ATACCACAAC    60
CTTATTACAT CAAACTGCTT TGGGCTTTAT CCTCTTTAAA GTGTGCTCAG GTGTTGAGCC    120
ACGAGGTTTC TGACAGCCCT CATAAGACCT TCGAG                155
```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```
GAATTCGGCC TTCATGGCCT ACTTTGAAGA GTACGATTC AAAACCAGCA ATTGGTGTGA    60
ATGCAAAAAC ATTTGTTGGC ACCATTATT TAAAAAAA AAAAGCTGTA TGCAGCAGAA    120
```

```

AGCCTTATAC AAGTTGTTTT TCTTTTTTTC CTTTTTCTTT TTTTGGGTAC CTTCAATTTCT 180
GTTACTTTTA TATAAAATTC TCTGCAAAGG AAGGCCTCTC TTTGGACTAC AATTTGGAGG 240
CAGCCACTTG TTGTGCCTGC TTCTGTAA GAATGTGGAT ATCAAGCCCC CCGACTCGA 300
G 301

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC TTCATGGCCT AATTTTACA GAAATTATTT CCACAATCAG AAGTACTGTA 60
CTGATTGCAT TTCTTTGTCT CAAAAGTTT TCCTTATGTT TCTCAAAGCA GTATTTACAC 120
TAATTATTCA ATTCTTATCT TTCTTCAGT TTTCTCCAAT AGACTGTGAG ATCTTTGAGG 180
GCCAGGTTGA CATGTCTCTG ATACCTACAC CCTATGCAGC TCCTAGTGCA GGACCTTGCA 240
GTGACAAGCT CGAG 254

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC TTCATGGCCT AATATTTATT TAGATGCTAT TATTACTGTT TGGACTTTTA 60
TTTTGGCAGG CTTTGTTCCT GACTGTAGGG TTTTCCAATG TGACTAATGA CCACTCCTGC 120
CTCTCCCGTG GTGTATTTTG GGCACCCTCC CACCCGGCTG CATACCCGGC CAGGGCTCCC 180
ACAGAGACAA GGAGGGCACA GGTGTCTGCC CCCTCTTTGA AATCGATATA CACACATCCA 240
CGCACATGCG GCCCACTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCTAGA CCTGCCTCGA GCTTCTGGCT GTTGTCTTTG CTGGGCATCC TTTTACAAG 60
TGGAAGAAGT AGGATGGCTT TCCAAGTCT TCTAGAAATG AAGTTCTTTC TCTGTGCAGC 120
TTTCCCCCTT GGAGCAGGAG TGAAGATGTT TCATTATCTT GGCCTGGGA AACCCTTCC 180
CCAGGCTTCT CCCTCCCCCC ACCCCGACT CGAG 214

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC TTCATGCCTA CAAACTTAA AGTAAATCTT TGGAAATCAG ATAGTAGTCT      60
TGAAACTATG GAAACACAG GAGTGATGGA TAAGGTTTCAG GCAGAGTCTG ATGGGGACAT      120
GTCTTCAGAT AATGACTCAT ACCACTCTGA TGAATTCCTT ACAAATTCTA AGTCTGATGA      180
AGACAGGCAG CTAGCTAACT CATTAGAGAG TGTAGGGCCA ATAGATTACC TTCTTCCTAG      240
TTGTGGTATT ATGCCTCAG CGCCTCGATT GGGCAGTCGG TCCCAGTCTC TTAGCAGCAC      300
ACTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC TTCATGGCCT ACTCCATATT TATTTAGATG CTATTATTAC TGTTTGGACT      60
TTTTATTTGG CAGGCTTTT TCCAGACTCT AGGGTTTTC AATGTGACTA ATGACCACAC      120
CTGCCTCTCC CGTCGTCTCT TCTGGGCACC CTCCCACCCG GCTGCATACC CGGCCAGGGC      180
TCCCACAGAG ACAAGGAGGG CACAGGTGTC TGCCCCCTCT TTAATAATCGA TCTACACACA      240
TCCACGCACA TGCACCCCG AGGAAACGAA ACCCACTCTA GAAAACGCGA CCTTGGCCGC      300
ACCTAAAGCA GCCAGCCGTG AGTGCAGACC CCTTGGCCAG CGTGGCGCAG TGGCCCTGAG      360
CAGTAGTGGC GTGTGTGTAG ATCAAGTCGG ATCTAGTCCA GCTCGGTTCA TTAGCGATCC      420
ATGTAATCTG ACGTCATCTT GTCTCGAAGT CTCTTTTTTT GGGCCAGGCC TTGAAGAATA      480
CACTGGACTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCTAGA CCTGCCCCTG CCTCCTGCAT CCAGCCCCCA ACATGGTGCC AAAGCTTCCA      60
GAAGCCAAAA AGCTTCTGAT TTTTAAGGTA GTGGGCATCT CTCTCCTAAT GACGAAGCTG      120
CTCAGCAACT CCACCTGCCC GCCGAGGAA GGAGCAGTCC CCTGCTATCC CTGCAGCCAC      180
TCCCAGCACA CCCGCACACA GCCAGCACCA CCGCCCACTC TCGAG                                         225

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC TTCATGGCCT ACTGGCTCAT ACAATACATC AATAAGTATG CAACTTTTCA      60
TTGTTATTTT CGTTGCTGGA AGTGGGAAAT ACCCCATCTT CCCAGGAGTG AAATGGTTCT      120
ACTTTCCTCT CGTGGTGCCC TGTATCATTG CTCAGCTCTG CTGCTGCTCT CCGCAGCCCC      180
TAAAAGTAGC ATGGATCGGG GAAGAAGGAA GGACGGCAGG AAGGCAGGCA GAGATCCTCA      240
GGCAGGTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GAATTCGGCC TTCATGGCCT AGTGTGTGTG TCGTGTGTG TGTGTTTACA TATAAAGTTT      60
TTTGGTAACA AATAAATTTT GTTAGAGCTA GTCAGATTTT TGTTTGCTTA ATCTGCTAGT      120
TTTGGTAGGT TATATTTTTC AAGGAATTGG TCCATTTTAC CTATGTTGTT GAATTTTGGG      180
TGTAACGTTT TTCATTACTC TTTCTTTT AATATCTGTG GGATCTGTAA TGATGCCCCC      240
TCTTTCATTC CTGATATGAG TAATTCTTAT TCTCTTTTG TCTATCAGCT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTGGCCT TCATGGCCTA ATTGGGACCA AATAGAGGCT CACAGATATT TGGATTATTT      60
TATGTGCTTA TTATTAAATA AGGAAAGCAT TTTGTGATAT GTGGAAGACG CTATGTGAAG      120
TTTACCTAT CTTCTCAAAG ACCTTTTCTT TTGTAITTTT TTTTGGTGTT TCCTAAAGCC      180
AAACAAAGAA ATGTTCTTAA GGAGACAGGG TGGGTTTTTC TGTGGGCCTA GGCCATGAAG      240
GTCGAG                                     246
```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```
GAATTCGGCC TTCATGGCCT ACCCTAATAT AAAAAGCATT GTCACCATGT TGATGCTGAT      60
GCTATTGATG ATGTTTGCTG TCCACTGTAC CTGGGTCACA AGCAATGCCT ACTCTAGTCC      120
AAGTGTTAGT CTGGCCTCAT ACAATCATGA TGGCACCAGG AATATCTTAG ATGATTTTAG      180
AGAAGCTTAC TTTTGGCTAA GGCAAAATAC AGATGAACAT GCACGAGTAA TGTCTTGGTG      240
GGATTATGCC TATCAGATAG CTGGAATGGC TAATAGAACT ACGTTGGTGG ATAATAACAC      300
CTGGAATAAC AGCCACATAG CACTGGTGGG AAAAGCTATG TCTCTCGAG      349
```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```
GAATTAAATA AGTTACTGAC TTTGTGACTT ATTTAATTCA TATTAATATA TTAGGCTTCC      60
CAACTGACGG TGTTCAGT GAGCTAGCTT CCAGTTTGG AGAAACACAT AGTTGATTAG      120
TTCTGTCAGT AATTTTCAGG GATATTAATA TAACCTTGAT ATTAGTGAGA AATTTCTTT      180
CAGTAGTAAA ATGTTTTCTA ACTTAGGAGC TGTTCTCGAG      220
```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```
GAATTCGGCC AAAGAGGCCT AGCAGAGCTT TCATATCCAC GATGCGTTTT CTGGCCGCCA      60
CGATCCTGCT GCTGGCGCTG GTCGCTGCCA GCCAGGCGGA GCCCCTGCAC TTCAAGGACT      120
GCGGCTCTAA GGTGGGAGTT ATAAAGGAGG TGAATGTGAG CCCATGTCCC ACCGATCCCT      180
GTCAGCTGCA CAAAGGCCAG TCCTACAGTG TCAACATCAC CTTTACCAGC GGCACCTCAGT      240
CCCAGAACAG CACGGCCTTG GTCCACGGCA TCCTGGAAGG GATCCGGGTC CCCTTCCCTA      300
TTCCTGAGCC TGACGTTGT AAGAGTGGAA TCAACTGCCC CAGTACAGTC GAG      353
```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

CCGATTGAAT TCTAGACCTG CCTCGCTTCC CCACCCTTAC TAACATTAAC GAAAATAAAC	60
CCACCCTACT AAACCCCAT T AAACGCCTGG CAGCCGGAAG CCTATTGCA GGATTTCTCA	120
TTACTAACAA CATTTCCCC GCATCCCCCT TCCAAACAAC AATCCCCCTC TACCTAAAC	180
TCACAGCCCT CGCTGTCACT TTCTAGGAC TTCTAACAGC CCTAGACCTC AACTACCTAA	240
CCAACAACT TAAAATAAAA TCCCCACTAT GCACATTTTA TTTCCCAAC TCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTGTGTA TTTTCTTTTC	60
TGTCCCAAAC AGTTTCCCC ACAAAAAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC	120
CTTCCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCTCAGA AACGAACAAT CCAGAACCCA	180
CTGTTTAAAA CAACTGTATT TTGCCTGGG AAGTCCCATT GCCTTCCCTG AAAACATTAA	240
ACATTCCTCC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCATCCT GCTCCACAGC	300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCCC TTTCCCAACC GCCGCCTGC	360
CTCCCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC TTCATGGCCT AGGAAAGATC TAATTATCAT GGACCTGCGA CAGTTTCTTA	60
TGTGCCTGTC CCTGTGCACA GCCTTTGCCT TGAGCAAACC CACAGAAAG AAGGACCGTG	120
TNCATCATGA GCCTCAGCTC AGTGACAAGG TTCACAATGA TGCTCAGAGT TTTGATTATG	180
ACCATGATGC CTTCTTGGGT GCTGAAGAAG CAAAGACCTT TGATCAGCTG ACACCAGAAG	240
AGAGCAAGGA AAGGCTTGA AAGATTGTAA GTAAAATAGA TGGCGACAAG GACGGGTTTG	300
TCACTGTGGA TGAGCTCAAA GACTGGATTA AATTGCACA AAAGCGCTGG ATTTACGAGG	360
ATGTAGAGCG ACAGTGAAG GGGCATGACC TCAATGAGGA CGGCCTCGTT TCCTGGGAGG	420
AGTATAAAAA TGCCACCTAC GGCTACGTTT TAGATGATCC AGATCCTGAT GATGGATTTA	480
ACTATAAACA GATGATGTT AGAGACGTT TCGAG	515

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	TTCATGGCCT	AGGGGACCTG	ACGTTCACTG	TGGCCCAAAA	GATGGCTGAG	60
CCAGAGAAGG	CCCCAGCCCT	CAGCATCCTG	CTGTACGTGC	AGGCCTTCCA	GGTGGGCATG	120
CCACCCCTG	GGTGCTGCAG	GGGCCCCCTG	CGCCCCAAGA	CACTCCTGCT	CACCAGCTCC	180
GAGATCTTCC	TCCTGGATGA	GGACTGTGTC	CACTACCCAC	TGCCCCGAGT	TGCCAAGAG	240
CCGCCGAGA	GAGACAGGTA	CCGGCTGGAC	SATGGCCGCC	GCGTCCGGA	CCTGGACCGA	300
GTGCTCATGG	GCTACCAGAC	CTACCCGAG	SCCCTCACC	TCGTCTTGA	TGACGTGCAA	360
GGTCATGACC	TCAAGCTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

GAATTCGGCC	TTCATGGCCT	AGCTCCACTT	TCTCTGAAAA	TTTATTCATA	TTGTTAATT	60
AATTTGTTT	TATTATAGAA	ATAATATATT	GCATGATTG	TAAAAATGCA	GAGGAACAGA	120
ATGGCACAAA	ATTATGTAAC	CCTTCTATC	TCCCCTTGGT	GTACCTCCTT	AATCATACTT	180
CTCAGAACCA	TTGTCAATAA	TTTGCTGGGA	GTTCTTCTGA	TGGTTACCAT	CGTGACTION	240
ASATTTATTT	CCCAGGTTCA	AGCGGTTCCC	CTGCCTCAGC	CTCCCGAGTA	TCTGGGACTA	300
CAGGCATGCA	CCACCACTCA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

GAATTCGGCC	TTCATGGCCT	TGCCTTTTTT	CTTTCACCAC	TTTACTACAC	ACAATTACTG	60
GATTAATCTC	TTTAATGCCG	AGATCTTTTT	TCCTTAGTGA	CACCTTAATC	ACTCTTAGCT	120
TAACATATAT	GGTCATCCAT	TACTGGGTG	CCTCTGCCTT	TCCAGGATTG	GCTGCCACTG	180
CTCCTCCACA	TACCCTGTAT	TCTAGCCAAA	TGGAATCACT	GCTGTGTCCC	AAGCAGATTC	240
TTTATTTCTC	TTGGCTGTTG	CTCTCTATTT	CTAATGCTAC	CTGCCCTTCA	AAACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

GAATTCGGCC	TTCATGGCCT	ACTTGATTG	TGGCTTATCT	CAAGTTACCA	TTTTTCAGTC	60
AAGTCTGTTT	GTTTGCTTCT	TCAGAAATGT	TTTTTACAAT	CTCAGAAAAA	AATATGTCCC	120

```

AGAAATTGAG TTTACTGTTG CTTGTATTTG GACTCATTTG GGGATTGATG TTACTGCACT 180
ATACTTTTCA ACAACCAAGA CATCAAAGCA GTGTCAAGTT ACGTGAGCAA ATACTAGACT 240
TAAGCAAAAG ATATGTTAAA GCTCTAGCAG AGGAAAATAA GAACACAGTG GATGTCGAGA 300
ACGGTGCTTC TATGGCAGGA TATGCGGATC TGAAAAGAAC AATTGCTGTC CTTCTGGATG 360
ACATTTTGCA ACGATTGGTG AAGCTGGAGA ACAAAGTTGA CTATATTGTT GTGAATGCCT 420
CAGCAGCCAA CACCACCAAT GGTACTAGTG GGAATTTGGT GCCAGTAACC ACAAATAAAA 480
GAACTAGTCT CGAG 494

```

(2) INFORMATION FOR SEQ ID NO:706:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC CTTTCATGGCC TACTCCCGAG CTCTACTGAC TCCCAAAAGA GCGCCCAAGA 60
AGAAATGGC CATAAGTGGG GTCCCTGTGC TAGGATTTT CATCATAGCT GTGCTGATGA 120
GCGCTCAGGA ATCATGGGCT ATCAAAGAAG AACATGTGAT CATCCAGGCC GAGTTCATC 180
TGAATCCTGA CCAATCAGGC GAGTTTATGT TTGACTTTGA TGGTGATGAG ATTTTCCATG 240
TGGATATGGC AAAGAAGGAG ACGTCTGGC GGCTTGAAGA ATTGGACGA TTGCCAGCT 300
TTGAGGCTCA AGGTGCATTG GCCAACATAG CTGTGGACAA AGCCAACCTG GAAATCATGA 360
CAAAGCGCTC CAACTATACT CCGATCACCA ATGTACCTCC AGAGGTAAC GTGCTCACGA 420
ACAGCCCTGT GGAAGTGA GAAGCCCAAC TCCTCATCTG TTTCATCGAC AAGTTCACCC 480
CACCCTCGA G 491

```

(2) INFORMATION FOR SEQ ID NO:707:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT ACCTTATCTT CTTAACCTTT CAAATACTTG CAGATATTTT 60
GCTTGGTGCT TCCCATCTAT TGCAATACCC CTTTAGATAA AGTCAATTCT TATCTAAAAT 120
CAAATTCATT TTATTTGACA ATGTTTACAA ACAACCCAG GACGATAACA ATTACACTCT 180
CAATACTGGC ATCACACCTT CACAATTACA CTAACCCCAA CCTAGGCCAT GAAGGCCTCG 240
AG 242

```

(2) INFORMATION FOR SEQ ID NO:708:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

GAATTCGGCC	TTCATGGCCT	AGACAGAATT	ACTGGGAACC	ATTTTCCAAG	TAGCCCACCA	60
CAAAGGTTGT	ATTTTGTCAA	ATTGAAGGAG	TCATCTGACT	TTCCTTAATC	ATAAGCTACA	120
AATATAATAA	GCTACATTAA	TAGATTTTCT	AATATTTATT	TAACTTTGAA	TTTCTGGAAA	180
AAACCCAACT	TGGTAATGAT	TTATCATCTG	AGCTTTGTTT	TTGGCTTTGG	TATGCTAATT	240
TTTGGCTTAG	GATTTTATA	TCTATTTTCT	GAGTGGCACC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCACGCCATG	GGAGAAAAG	AAGAAGCCAA	AAAAACAGAA	GACAAGTCTT	TGGCAAAGCC	60
TGAAACTGAT	AAAGAACAGG	ACAGTGAAAT	GGAGAAGGCT	GGAAGAGAAG	ATATGGATAT	120
AAGTAAATCT	GCAGAGGAGC	CACAGGAAAA	AGTTGACTTG	ACTCTAGATT	GGTTAACTGA	180
AACCTCTGAA	GAGGCAAAAG	GAGGAGCAGC	ACCAGAAGGA	CCGAATGAAG	CTGAGGTCAC	240
TTCTGGGAAG	CCAGAACAGG	AAGTACCAGA	TGCTGAGGAA	GAAAAATCAG	TTTCTGGAAC	300
TGATGTCCAA	GATCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTCGGCC	TTCATGGCCT	AGACACATAC	AAAGATAAGG	CTTTGATAAA	ATTCAAGAGT	60
TATTTGTATT	TTGAGGAAAA	AGACTTTGTG	GATAAAGCAG	AGAAGAGCCT	GAAGCAGACT	120
CCCCATAGTG	AGATAATATT	TTATAAAAT	GGTGCAATC	AAGGTGTGGC	TTACAAAGAC	180
ATTTCTCGAG						190

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GGATTGAATT	CTAGACCTGC	CTCGAGTAAG	ACCCCTTTTT	AAAATGACTC	CCACTGTCTA	60
TTCCACAGCC	GGTGTGCGGC	ATGCTGATT	AATCCCCACA	ACAGCCCAGG	AGGTAGGCGC	120
CGTCCCATCC	TCCTTTACAG	GAGGGGAAAC	TGAGGTTT	GTGTCAGAT	GGTCAGCTGC	180
CTCCAAGACC	ACGCTCGAG					199

(2) INFORMATION FOR SEQ ID NO:712:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```

GAATTCGGCC TTCATGGCCT ACCTGTACCT GTTTTATACT TGCTTTTGCT TCAGCGTTCT      60
GTGGTTGTCA ACAGATGCCA GTGAGAGCAG GTGCCAGCAG GGAAGACAC AATTGGAGT      120
TGGCCTGAGA TCTGGGGGAG AAAATCACCT CTGGCTTCTT GAAGGAACCC CCTCTCTCCA      180
GTCATGTTGG GCTGCCTGCT GCCAGGACTC TGCCTGCCAT GTCTTTTGCT GGCTAGAAGG      240
GATGTGCATT CAGGCAGACT GCAGCAGGCC CCAGAGCTGC CGGGCTTTTA GAACACTCCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:713:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 361 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```

GAATTCGCCC TTCATGGCCT ACCCAATTCA GTTTCCAGAG GAGGTGGAAC CTTCTGCAAC      60
CCAACAGGAG GCCCAATTG AGCCTCCAGT TTCTCCTATG GAGCATGAAC TTTCCATCAG      120
TGAGCAGCAG CAGCCAGTTC AGCCTTCTGA GTCTTCTAGG GAGGTCGAAT CTTCTCTGAC      180
CCAGCAGGAG ACCCCAGGTC AGCCTCCAGA ACATCATGAA GTCACAGTTT CACCTCCAGG      240
TCACCATCAA ACTCATCATT TAGATTCACC CAGTGTCTCT GTGAAGCCTC CAGACGTGCA      300
GCTCACCATA GCAGCAGAGC CTAGTGCAGA GGTGGGAACT TCTCTAGTCC GACCCCTCGA      360
G                                     361

```

(2) INFORMATION FOR SEQ ID NO:714:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT ACCGAGATGG AAATAACCTA AGAAAAAGAG GGCATCCAGC      60
TCCATCTCCC ATTTGGCGTC ATGCTGCTCT GGGTCTGGTA ACTCTTTGCC TGATGTTGCT      120
GATTGGGCTG GTGACGTGG GGATGATGTT TTTGCAGATA TCTAATGACA TTAACCTCAGA      180
TTCAGAGAAA TTGAGTCAAC TTCAGAAAAC CATCCAACAG CAGCAGGATA ACTTATCCCA      240
GCAACTGGGC AACTCCAACA ACTTGTCCAT GGAGGAGGAA TTTCTCAAGT CACAGATCTC      300
CAGTCTTAAC CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCC TTCATGGCCT AGGCAATATC AAGGTTTTAA ATCTCGGAGA AATGGCTTTC      60
GTTTGCTTGG CTATCGGATG CTTATATACC TTTCTGATAA GCACAACATT TGGCTGTA      120
TCATCTTCAG ACACCGAGAT AAAAGTTAAC CCTCCTCAGG ATTTTGAGAT AGTGGATCCC      180
GGATACTTAG GTTATCTCTA TTTGCAATGG CAACCCCCAC TGTCTCTGGA TCATTTTAAG      240
GAATGCACAG TGAATATGA ACTAAAATAC CGAAACATTG GTAGTGAAAC ATGGAAGACC      300
ATCATTACTA AGAATCTACA TTACAAAGAT GGGTTTGATC TTAACAAGGG CATTGAAGCG      360
AAGATACACA CGCTTTTACC ATGGCAATGC ACAAATGGAT CAGAAGTTCA AAGTTCCTGG      420
GCAGAACTA CTTATTGGAT ATCACCACAT CTCGAG      456

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGATCATTCA GTGGCTCACC TAATATCACA GAACAAGTGG      60
TGGAGTCAGA ATCTTTTATC TAAAGGAGAT ATTTTCATCC TTAGATTAAT GTCCTCTTCA      120
CAGTCTCATG CTACTTTCCT TTAATGAA ATTGCTGTTT TTTTITTAAT TGATTGGGCC      180
AATTCATTT GTAACGGAAG AATCAAAATT AGAGCCCGGG TCTATCCTA CGGTATCTCG      240
TCCTGAACCT CTGGTCTCCC TCAAGATGA CTCAGAAGGA CGGACTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA GCCTTTTAAA CTTGTAGGAA TTAAGAAATA      60
AGAATAACCT ACAAAATGCT AGCAAAATTT ATCTCATTTT TTTTCATTGT ATTTTCAGGT      120
TTAACTGAAC TGAATGACAG TCCAGTCCCC CTAGAACTTG AGCGCTGCAA GTCTCCTACC      180
TCAGACCATG TAAATGGACA CTGCACAAGT CCAACTTCTC AGAGTTGCAG TTCTGGAAAA      240
CGTCTTTCTA GTGCCGATGT TTCRAAAGTA AATCGCTGGG GTCTGGAAG ACCACCAGTT      300
CTCGAG      306

```

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

```

GAATTCGGCC TTCATGGCCT AATATTTATT AAATGACTTG GTAGATAGAG CAACTGACTG      60
AATATATTAT TTTTtagGAA GAAGAAGAAC ATTTTGCCTT AAATTAAATT TCTTATTTTA      120
TTTCTCTTTC CCCTTTTATC CAGGGTAGGT CCAGGTAAAG CCAAAGGCCT TATCCTTATC      180
TACACTGCTG GGGGACACAA CACAAGAATT TCAAGTCAA GTATTATTTT TCATTTTGAG      240
TAATTTTGTT CTCATTTTGT TCCAGTTCTC ACTCTCAGAA AAAGATTACT CGAG      294

```

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

```

GAAACAATAG AAACACTGAG AGAAAATTCA GAGAGACAGA TTAAGATACT GGAACAGGAA      60
AATGAACATC TGAATCAAAC AGTGTCTTCC TTAAGGCAGC GGTCCCAGAT AAGTGCAGAA      120
GCAAGAGTGA AAGACATTGA AAAAGAAAAC AAAATTCTTC ATGAATCTAT CAAAGAAACA      180
AGTAGCAAGC TAAGCAAGAT TGAATTTGAA AAAAGACAAA TTAAAAAAGA ATTGGAACAT      240
TATAAAGAAA AAGGAAGCTC GAG      263

```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

GAATTCGGCC TTCATGGCCT ACCTGCCCTT CTGCGGTCAC AGCTGCCTGC TGGGTGGGAG      60
TCCGGGGGAA TGGTATGTGT GGTCAACAGA GGGCACTGAG TGGGCTTCAG TGGCATGTGA      120
ATCCTGGCAG AGTCTCGGAT CCCCgATGGG GAGAGGAGAA AGCACAAGCC AAGACAACGA      180
GTGGGGGAAG GAGGCAGGGG CTAAGTGACG GGTGGGGGGT GGGGGTGGGA ACTCCAGTGT      240
ACACATTGAC AGTCTCTATG TTGGCTTCAC CAGCGCTTCT CTGTTTGTCT CGTCCCTGGA      300
TTTCTAACAG TTGCCTCGAG      320

```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

GAATTCGGCC	TTCATGGCCT	AGTCGGGAGT	GTCTTAAGCT	TTTCATTIAA	CCTAAAGTAC	60
AGAGTCTGCT	CTGTAGAAAT	ATGTCATTAA	GAAAATATTT	GAGTCCCAGC	TCCTCCTTGT	120
TGTGTAATGT	CTGATAATTT	CACTCATTAA	ATTACCCAGA	CAGACCATAA	AGTCCTCTCA	180
GTTTGCATCA	CCTGAAAGTC	AGTCAGCCTG	GGCTGTGAGG	ATTGTGAGGT	AGAACTCACT	240
GTGGAAGGAC	GGCATTAGGG	AAGACTTTAG	GAAAATGGAG	CGGAACCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

CTCGAGACCT	GTGTGCGCAG	GCAACGGGGA	AACTGGAAAT	GCGTTGACAA	ACTGACGCAA	60
AACTGGGCCC	AACAGCCACA	AGGCACTGGT	CGTTTTCCAC	TGGGCAAAGT	TCAGTCGCAT	120
TTCTTTCTGT	TCTCTTTCTT	TCTTTCTTTT	CTTTTCTCTC	TTTCTTTCTT	TCTTTCTTTC	180
TTTCTTTTTT	CTTTCTCTCT	CTCTTCTGT	CTGTCTCTCT	CTTTCTTTCC	TTCTTTCCTT	240
CCTTCCTTCT	TTCTTTCCTT	CCTTTCCTTT	CTTTCTTTTT	TTTTTCTTTT	AAGAGACGGA	300
GTCTCGCTCT	GTTACCCAGG	CCGGAGTGCA	ATGGCACAAT	CTCGGCTCAC	TAGGCCATGA	360
AGGCCGAATT	C					371

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCGGCC	TTCATGGCCT	AGTTCCTTGG	TGTTTTGAAA	GTTAGAGAGA	TCCTGATAAG	60
CATAATGACC	AACATAGAAG	AGATTAAGTA	CCTTTACTCA	TAAATGTGAG	TTCACAGACT	120
TCAGGTCTAA	ATTCGTAACA	ATATTTAAGA	TGTATATGGC	TTAAAGTGCT	GGTAGTTTGT	180
ATTAGAATCC	ATAGGTTTCT	AGTCACTGCT	CTTTTCATTA	TTTGAGTTT	TATGTATTTT	240
TTAACTAGAA	ATAAGAGGGT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:


```

GAATTCGGCT TCATGGCCTA GAAAGTTTTT CAAAAATTCT TCAATTGTCT CTGTTGATG      60
CAACTTAATT TTTTGCTGAG AGAGACCTTA AATGTAATTA GTATTGTATA ATTAGCCTGA      120
TTAATCTGAC CTGTACATCA CGAGTCACTT GTCTTTAGCC CAAGAGGAAT GCTTCCTTTC      180
TGATTTGAGG CAGTGGCCCA TCATTGCTTC TAGCAACCTT CCTACTTACT AGATGACCTT      240
GAGTCAAGGT TTCTGTATAT ATGATTTCAG ATTTGTCCCC TAGAACTGAA AAAGGGTAGG      300
AGAGGCAAAG ATAGGAAAAA TATTTTAA AAATTTTAA GTATTTTATT TTTATTGGGA      360
AAATATTAT TGTAAGTCTT CCATTGTGA TCCTTCTGCC ACTAGCATT CGTAAAAAGT      420
AAAAAGAGCT TTACATCAA AAGCACAATG AAACCTTGTA TCCTTAAGTC CGTACTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGGT GTAGGAGGGG CCGTGGAGGT CCAGGTGACT      60
GCTTAGAAAA CTGCACAGCA TCTGATGAAA TTAGCGAATA AGAACATCAA CCATGTCTTA      120
CACTCCAGGA GTTGGTGGTG ACCCCGCCCA GTTGGCCAG AGGATCTCTT CTAACATCCA      180
GAAGATCACA CAGTGTTCTG TGGAAATACA AAGAAGCTCTG AATCAACTTG GAACACCTCA      240
AGATTCACCT GAATTGAGGC AACAGTTGCA ACAGAAGCAG CAGTATACTA ACCAGCTTGC      300
CAAAGAAACA GATAAGTACA TTAAAGAGTT TGGATCTCTG CCCACCACCC CCAGTGAACA      360
GCGTCAAAGG AAAATACAGA AGGATCGCTT AGTGGCAGAG TTCACAACAT CACTGACAAA      420
CTTCGCAAG GACTCGAG                                     438

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```

GAATTCGGCC TTCATGGCCT AGCTACCTAT CTACAAAAAC TCCTGGATCC TTTATTACGA      60
ATTGTGATCA CATCCTCTGA TTGGCAACAT GTTAGCTTTG AAGTGGATCC TACCAGGTTT      120
GTCATCTTTT CACATAGAAC CGCTGTTTTT TGTCTTTTTT TTTTGTGTTG TTGTTTTACT      180
AAACTGCAAT GAAGCAAGGC ACCTTCTCCC CTTGATCATT AAAATTAGTT TTTAATTATA      240
AAAGTTATAT ACAAATACAC GTTCTTTTAA TGATATCTGT AATTTTTTTT TAAGGTATCC      300
TTTTATTTGC CTTAGATCCA GGGACAAACT AGAGAAAGGT GTCTTTGACT TCCACCTCCA      360
GAGACTGTTA CTAGTTAAGT CTGTTCCCCT GTCCTTTTTC CATGCACCGC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```

GAATTCGGCC TTCATGGCCT AAGGAGGTCC ATGAGGAACT GTCCAGCCT GTCAGTGCAT      60
CTCATGAGTT CGCTAGTGA TCAGCAGACA GTTCCAGGAA GTGAACAAGT CCAAGAGGAC      120
TTCTGATTAG TCCACAGTCT CCTCTATAGG CTCAGTAGAT GAAGGCGTTT CTGAGGGCTT      180
GCCTACACTT CAAAGCACGT CTAGCACTAA TGCTCCTCCG GATGATGATG ATCGATTGGA      240
AAATGTTTCA TATCCCTACC AACTCTACAT TGCTCCTTCC ACCAGCAGTA CAGAGCGACC      300
AAGTCCAAAT GGTCCCGACA GACCTTTTCA GTGTCCAACC TCGGGGTGC GATTCAACCG      360
TATTCAGAAC CTAAAGCAGC ACATGCTCAT CCACTCAGGA ATTAAACCAT TTCAGTGTGA      420
CCGCTGTGGG TCTCGAG                                     437

```

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```

GAATTCGGCC TTCATGGCCT AGATCACTGC CCTTTCAATA AACTCTTGC CTCTAGAATC      60
ATATGTTCAA AGTATGAATA CACACCTAGC ACATAGTAGG TGCTCAAATA TTAATTTCTT      120
CCTTGCCCTC CTTATCTACC CTGTGTCCTC CATTCCCCCG TATGATTCCA ACCCAATATA      180
GCAAATGACA TTTACATGTT ATGAAAACAT CTATTGGGTA AAATCAGATC TTGGATAAAG      240
AAATTCTGAC TTTTATATAA GCTTTTGGTA GACAGAAAAA ACAGAAAGGT ATTCGTTGGT      300
AGAACATTTT TAAGTTCAGG AAAGAAAGCT GGAATAATAC TACGTAACTT TGTCCAGGTT      360
ACTTTGACTG AAACACGTTT TTGGTGGATT TCTTTTCTC AAAGAACTCT CTAATGCAA      420
CTCCTTGCTG GATTCTCAC CCGATCTCGA G                                     451

```

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```

GAATTCAACC ATTAAAGATA ATTTATATTA GTGTTCTAT AACTTCTAAA ACATCTTTTG      60
ATAAGGATAA TAATCTCATT GTCATTCTGT ACTGATATT GGATATAATC CTAGCAGGGC      120
ATAGCTCTGA TTAAGAACAA TTGAACCATT CAATTTTTTA TTAGCCTCTA TTTTCACTAG      180
CCAGGATATT TTCATGAAAC TTTTGTAGTT CAAAGCAAGT TTTTCTTTC CAATAGAAAG      240
TGTTATATTA GTAACAATT TTGTCTTCTG CCAAGACCAG CTCAGTCGGG AAGATCCTAA      300
CCCAGTGGCA AAACCTGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```

GAATTCGGCC TTCATGGCCT AGGGAAGAAT AAAGAACAAA ACCCAAACT TTGGACCTTA      60
AAAAACCCAG GCTGGCATT TAGTAGCAAT TGGGTGTGTT CGGTTTGA TATATTGTA      120
TATACATGCC TCCATGTGCT TTGGCCTTCT GGTATCTTCA CCAGATGCTG CCTTTTTTTT      180
TTTTTTTAAC AAGTTCCTGT TTCACTTTTC CAGCTAGCTG CTGGGTATCT CCAACAAAAT      240
ATCTCATAGA TCTCCCACT GTAATGTATT CAAGCCAAA ATCAGCTCTG CCCATTCTCC      300
ATCCCAAAGC CCCTCCTCTT GGTACCAGA CAACCTTAAC CAAACCACTC GAG          353

```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```

GAATTCGGCC TTCATGGCCT AGAGGAGGAA GGCCTTCGTA AAGGTGCAT CTCCGTCCCT      60
TCGCTCCCGG GGACCCCGCG GAAAAAATAA AATCCAACAC CCAGGCCCGG CGGCTAGCCC      120
CTTCCACAG GCTCTCTCCG CTCGATTTTG TCACCGTTAT GTGGGAAGCG AATCCATGTA      180
TTTGCAAGCC CGAGTCTTTG AGCCGTGCTA TACCACTTTG TCCAGATTGT TTATACTAGC      240
AATGCAGTTT ACGGTGAAGA CTGCTCTTCC CTCTGGGAAT CTGGAGCTTC AGTAACAGGA      300
GATGTTTCAC AAAGCAGAAG AATTATTTTC TAAACAACA AACATGAAG TGGATGACAT      360
GGACACGTCA GATACCCAGC TCGAG          385

```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT ACTCCGTCTC CAAAAAATAA AAAAAATAGT GTTCAGCAAG      60
GTTGAAGCAT AAAAGGTAA TAGCCAGAAT CATTTATCAA TTGTATTCT ATACATCTAC      120
AAGACACAAT CTGAAATGA AATTAGAGAA ACAATTTCAC TGGGCAACAA GAGCAAACT      180
TCATCTCAA ATAATAATA TAATAATAAT AATCATCATC ATCATCATCA TCTACAATGT      240
CATTTCCCAT CCAAGTCTCG AG          262

```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGCTCCTG	GCCTCGGGCA	CTCTACCCGC	60
TTCAGCCTCC	CAAAGTGCTG	CGACTGATTA	CAAGTATGAG	CCACTACGCC	TGACCATAAC	120
ATGTAAAATT	ATGGCAAATG	GTAATTCACA	GCTCAATTCT	AAAATGTGAT	GAAATTTAAA	180
TCAGAAAGGC	CAAATGAGTC	ACTTTTCTT	AACACTAAGA	ATTATAAACC	TTTAAATTTC	240
TTTGTACTG	TAATTTTSTA	TGTGACATGT	ATATGCTTTT	TAATATGTGT	GATAGGATGA	300
GGGGCAGGAG	AGGGGGCTCT	AGACATGAGG	GTGCCTGGGG	CCTCTGTAGA	CCTTCAGATG	360
GCCCTGGGTG	TTATAGCAAG	AGCTGGTCTA	CATCTAATAC	TACTGCAGGT	GCTGTCATGA	420
ATTCTTTGTA	TAATCTTTTG	TATATTAAAT	GACATTATTC	TATGTATAAT	GTCATTTAAT	480
ACTTATAACC	TACTTTCCTC	GAG				503

(2) INFORMATION FOR SEQ ID NO:734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

GAATTCGGCC	TTCATGGCNT	AATGGATTCA	TTTTTTTCA	GCAGCATGGC	ATAGTGGATT	60
ATGAAATCAA	AATTAACATC	ATGTGGAGTC	NTACATTGAA	ATCCCCCTTC	AACAAAATAG	120
TATACTATGA	GTATTTTAA	ATTATTTAAC	CCCTCCGAAC	ACCAATTTGT	ACACGAATAA	180
AACCTTGACAC	AACAGGATTT	TGTGGGGCGT	GAGTAACACA	ACATATACAA	AAGCACCTTA	240
TAAAGTGTTT	TATATAGCAA	CTTCTCTCTC	AGTTTGAACG	GGTCTCAGGA	TAAATTAGCA	300
AATATGAATT	CTAACCTTTG	TACTTACATT	TTAATTCTGC	TAAGTGTGTG	AACCCCAATT	360
TAGCAATTAA	AATATTTATT	TCCAGAATGT	TTTGACCCTG	AGCATATTTT	TAAAAAGCAC	420
AGTAGCTCGA	G					431

(2) INFORMATION FOR SEQ ID NO:735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

AAAAGTGACT	GAAAGTTTGC	TAGTGTTTTT	AGTACCGATA	TTTACTGGTA	GTAAATATAT	60
ACTAAATCCA	GTGAAATATG	ACTTCTCTAA	CTGAGCTTGA	CATATCCTGG	TTATATCTCA	120
TGGCAGCTGA	AAACTAGAAA	TGACTTATTT	TTACCTTGTA	GCCACAGCAC	ACTTGAGGTT	180
ATTCTTAGGT	TTTGTTTAGA	GACAAAGCTG	GTTAGTGACT	CCTGGATTAA	GAATTATGAG	240
TGATCCCAT	ACCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

```

GAATTCGGCC TTCATGGCCT AAAGGATATT GGCATGTTCC TCTTCTCATC AATATCCTAA      60
AAGACATTTA TTTTTCACAC ACTCCTTGGG AAAAATTAAC TTTTTCAC TGAAAAATATT      120
TCCTTTTTTG GTTATCTTGA TCTCAGATTA TTTGTGAAA GAATTTTACT GTACTTAGTT      180
CAAAAGAGTA GAAAGAATGA TTTACTATTG CAGACATATG TAGGGTAAAA TCATAATTTA      240
TTTAACTGA CTGTACAACA CCATTTAGAG TTGATATTGA CATAAATGTT ATTAGCCTAC      300
TAATTGGAA CTGCATTTCT CAACAATGCT GGCAAGCATC TTCCGTACTT AGCATACCAA      360
GTTGTAGGG AGAGACTGTG TATATATTTT TTAAGCAA TCCAATGAT TTGTTTTGT      420
TCATATTTTG GAAACAATC GAG                                         443

```

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

```

GAATTCGGCT TCATGGCCTA CAAAAGATGG CCCTAAGCCT GGCCTCTAGC TTCACTCGT      60
GGTGAATATT TCAGACCTAA AGATCCAGAT AGTATCTCTG TTCATATGTG AATAAGTTGA      120
AGATTGTGGG GCTACTTTTT CTCATAGCAC TTTATTTTGA ATGTTGTAG TTTGTGCTGA      180
GAATGGTCGT CCGTATTTGA ACCAATTATT TATTTTAAAA TATATTAAAG CTACATTTT      240
GTTTTGAAAA ATTGCCATAA ATTTGGTGCC ACTTCTTTT ATTTATTTGA CTGAGTTAAT      300
ATTATGTAT TAACATTTTA AGTATATGTT GTTTACATTC TTATTTCTTT TGACATTTTG      360
GAAATAATCA TAACCTGTCT TTCCAAAATA ACCATTTTCT TGATGGAACT CTCCTAGAG      420
TTTTTACCAA ATAGCTAACT TTAGTAGTAA AACCTCATTG TGTATCCATT CCCCCACTCG      480
AG                                         482

```

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

```

GAATTCGGCC TTCATGGCCT AGATTGTCAG TTTATCTTAG ATGATGAGGA AGCAGTACCA      60
AGAAAACACT TGGGGGTTGA TACAACAGGC ACATGAGCCC TTAAGTCC TTCCTGTTTT      120
TTTTCTTTTT TTTTCTCTT AGGTAGATTA GTGCATTTAA AGCCTGAAGT TAATTTGACC      180
TAAATTTTT ATAAGTCTTT GCAGAAAGTT CACTTGTTC CTGAAATCAT CTCCTTGATA      240
ATTTTTATG TAACAGTTGT TCATATTGTA GGAATGATAT ATATGTCATC CTGTTACACG      300
TGTCAGGCAC TTCAAAAAGA CTCCAAGAGA ACATGCCTGA GAAAGATAAC TCCAATTAA      360
AAATGATTCA GTCCCTCACT TGCAATATTC AGGATAAATG TGTGGAAACA TTAGGCTACC      420
AGATAAATAA AAGGTAGTTA TTTCTAGG TGACTCAGCA AGATATTTCT CGAG          474

```

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 211 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT AGCCTTTGAG ATCAATACCT GTGAAAAGTA GGGAAAGAAA	60
GCAGATGAGG CATAGGGAAA AGGTGGACTG CCACAGGCAA CCCAGCGAAC CTCACCAGCA	120
GCTCTGGAGC TAAATAGCT CTTCAGAATT GTCCAGAGTT GGGCTGAGGA GGCCAGAATT	180
TTATTTGTGT TCCCACGATG ACGACTTCGA G	211

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GAATTCGGCC TTCATGGCCT AAATACCTTA ATGGTGGTAG AGCCTTTACC TGTAGCTTGA	60
AAGGGGAAAG ATTGGAGGTA AGAGAGAAAA TGAAAGAACA CCTCTGGGTC CTTCTGTCCA	120
GTTTTAGCA CTAGTCTTAC TCAGCTATCC ATTATAGTTT TGCCCTTAAG AAGTCATGAT	180
TAACTTATGA AAAAAATTATT TGGGGACAGG AGTGTGATAC CTTCTTGTTT TTTTCTTGC	240
AGCCCTCAA TCCTATCTTC CTGCCCCACA ATGTGAGCAG CTACCCCTGA TACTCCTTTT	300
CTTTAATGAT TAACTATCA ACTTGATAAA TAACTTATAG GTGATAGTGA TAATTCCTGA	360
TTCCAAGAAT GCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TTCATGGCCT AAGGCGTTTG GGGTTTCCTA GTTGTGCTGC TGCTCTTGCC	60
TAGGGAATCT GCTCTTGCTT TGGCCTCTTT CCTTGGGGCA AGAGTGAGGG GGACAGGGAG	120
CTTCAAGTCA GCCCTCCATG TTGAAGTTTG GTAGAAGCTC TGCCACACACC TTGGACTGGA	180
ACCCAGCCAT GCCAATCCCC ATGATCACCA ATCCGAACCC CTTGAAGTAG AATTTTCATA	240
CCCTACTGAC TAACCACCTT CTTAGCCAGG CCATAGCCAT TCAGCAGTGC CTCCTTCTC	300
TGGGTAGACA AACAGCCTTG AACAGAAAGG TGAACACTC GAG	343

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC TTCTGGCCTA GAGTCCTTGT TGTCTTTGTC AAAGGTTGCT CATCACCTCT	60
CCCTCCCTC TGGCTCTTTT CCGTGGTGAT GCATAGTCA ATGCGCCAC GAACCTTCAT	120
GATGAGGCCG TCACCCAAAC TAGCAGCCCT CCTTTCCTTC TTTCTTGCC AAGTGTCCTG	180
GACATCAGCT CTTCTCAGT CTTTGACTCT AAATAAAGAA CTTGAATTTC ACCATTCAAC	240
TGAAATCCCT CTAACCTCG	259

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC TTCATGGCCT ACACCGTCGC CATTGCCAGA AAGAGCGATT TATGGCTTTG	60
TTCTTTTCTT AAGCTCCCAA TTTGGCTTCA TACTTTACCT CGTGTGGGCC TTTATTCCTG	120
AATCTTGGCT AAACCTCTTA GGTTTAACCT ATTGGCCTCA AAAATATTGG GCAGTTGCAT	180
TACCTGTCTA CCTCCTTATT GCTATAGTAA TTGGCTACGT GCTCTTGTTC GGGATTAACA	240
TGATGAGTAC CTCCTCACTC GACTCCATCC ATACAATCAC AGATAACTAT GCAAAAAATC	300
AACAGCAGAA GAAATACCAA GAGGAGGCCA TTCCAGCCTT AAGAGATATT TCTATTAGTG	360
AAGTAAACCA AATGTTCTTT CTTGCAGCCA AAGAACTTTA CACCAAAAAC TGAAGTGTG	420
GTAACCATAG TAACACCAAG CACACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC TTCATGGCCT AAATCTTCAG GGTCTTAACT TAGTTTTGA TCCCTAAAAT	60
TAGTGCTGCA TATGTAGACT CAGAAACCTC ACGTAAAAAT TTAAATTGGC CTCAGGTTGG	120
CAATGTTCCA AGGCAATGGT TAGAAGCAAA TTCAGATTCT CCAAGGCCTC AAATAATTCC	180
TACAGATAAA ATCCCAAGGA AATTCAGCAG TGCCTAGTCA AAAATCCACA AATCAGGCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```

AAGCGAGGCC CTGGGGGACA ACGTGAAACA ATACTGGGCT AACCTAAAGC TGTGGTTCAA      60
GCAGAAGATC AGCAAAGAGG AGTTTGACCT TGAAGCTCAT AGACTTCTCA CACAGGATAA      120
TGTCCATTCT CACAATGATT TCCTCCTGGC CATTCCTCAG CGTTGTCAGA TTTGGTTTC      180
TACACCAGAT GGTGCTGGAT CTTTGCTTG GCCAGGGGGT TCCGAGCTT CTCGAG      236

```

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```

GAATTCTAGA CCTGCCTCGA GCCTGCAGAC ATCTCCTCCT TCTTTGTGGT TCTGGGAGCC      60
ATTCTGTGCC TCTAAGGTCC TCTTCTTTT TTCTCACCAG TACACATATT TTCTGTCCTT      120
CGCAATTCTA TTAAACCTCA CATTTGATGG TTGTTTTCTT AAAATTCCTT TACTTGGTTC      180
CTGCATTCTT CATTCTTCC CAGCACAATC TCGAG      215

```

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```

GAATTCGGCC TTCATGGCCT AGAAGAAAAC CCATCAGATA TTATAATAAG ACAATAACTC      60
AATTCAGAC TTGTAAACAA AGGTGACATT AATCTATTGA AATGTGGGAA AATAGTCAAC      120
CTGTATCCTT CTCATACCAT AAATCAGCAT GTTTGATCAC TGAAGCTTC ATTTTGATGA      180
TTAGCAGTCA TGTATTGAGG CTAAATGATA TGTTGTGCGC ACAGCATCTC GAG      233

```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```

GAATTCGCCT TCATGGCCTA CACAGGAGAA AAACCCTATG AATGTAGTGA ATGTGGGAAA      60
ACTTTTGTTT AGAAGTCCAC CCTCAGAGAT CATCACAGAA TTCACACAGG GGAGAAATCC      120
TTTCAATGCA ATCAATGTGG AAAAACATTG GGCCAGAAGT CAAACCTCAG AATACATCAG      180

```


AGAACTCACA CTGGGGAGAA AACTTACCAG TGTAATGAAT GTGAAAAATC CTTCTGGCGA 240
 AAAGATCATC TCATTCAACA TCAACTCGAG 270

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCTAGT TTAATTACAT ATACCTCTCT GTTGGCTTAG TAGTAATAAA AATATTTTCT 60
 GTAGGTGTAG AATATCCTTA CAGTCCAAAA GGAGAGTACA TGTTCACAAT TAAACTTTGA 120
 AATTTGTGCT TTGATAACAG CATGTTTTAT TCATTCATTT TTATAATAAT ATTACTGAGC 180
 CTGTATCATA TAGTGATGAA CTTTTCAGCT GTTTTGAGGG TTTGTGTTAG CCACATTCAC 240
 ATTTGTATAA CCTGTGTTTC TTTTTATTT TTCTTTATTT TCATTTTAGA TTCAGGGGGT 300
 CGGCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGCC TTCATGGCCT AAGCTCTTTT AGTGAAGGAT TGTTTTAAAT AAGAGCTCTC 60
 AGTTCAAGAC AACTACTGTT AGGAGCTTAA ATCGGAACCA CAATCAGCAT ATAAAGGTCC 120
 TAATCCTGAC CTTAATCCCT TTGGAATATT GGTTTTATAA ATCATCAATC AACAGTGTTT 180
 CACTATGAAA GCATATTCTG TCTTCTTCTT TTCATGTATT CCTTCACTGC TGGTGCTTAA 240
 TGTCTTTCCT TCCTCTTCTG CCATTTCTCT TTCCATGAAT TATAATTGCC TTTTGAATTC 300
 AGAAATTAAA ACCACTCCAC AGCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGCC TTCATGGCCT AATAAGGAAG AAATTGTCTC ACTTTATTGA ATAGTTGATT 60
 TAAATTTTCT GGTATTTAGA GGTAATATAG TATAAGTTT TTGTATATTT ATCTAAGATT 120
 TTCCTTTTGA AAATTTTCTT CCCTTTTCAT ATTATTTTCA TTAAACGATT TTCCTTTAA 180
 ATTTGTTACT AACAAGAACT ATCTAATATG CAATGAGATT TTTGCAGGGC ATTCTCGAG 239

(2) INFORMATION FOR SEQ ID NO:752:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```
GAATTCGGCC TTCATGGCCT AAGGAAAGTA CTTAGACAA AAAAAAAAAA AAAAGTGAAA      60
TTAATTCCTG GGGCAATGAA AGGAAATGTC ATTGGCAGTT TTACCTTTAT TCTGCTAATG      120
GCTATTGTGT GTCTGTTTAC CTGGAGGCAC TTGGAAGTTG TGGCACAGAA TGCTGTATGT      180
ACAGGATATC ATCTACATGG GAATAATTGT TGTAACACC CCAAACTCGA G                231
```

(2) INFORMATION FOR SEQ ID NO:753:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```
GAATTCGGCC TTCATGGCCT ACAATAGAGC TCTTAACTT ATTAACTGA AATTTTGTAT      60
CTTTTCACCA ACATTTCCCC AACTCCCCCTT TACCCCAACT ACTCCAGCCA CTGATAACCA      120
CCATTCTGTT CTCTATTCTT TTTCTTTTTT TTTTTTTTTT TTTTAAAGAG ATGGCGTCTT      180
GCTGTGTCGC CCAGGCTGAA GGGCAGTGGC ATGATCTCGG CTTACTGCAA CCTCTGCCTC      240
CCCGGTTTAA GCAATTCTCT ACCTCAGCCT CCCGAGTAGC TGGGATTACA AGCACCCATC      300
CACTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:754:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```
GAATCTAGA CCTGCCTCGA GCCCTTTGTG GTTTTAAAG AAAAAATTCT GTGCAGATCT      60
GTTCTCCTC CTGCTCCTC CCTTTTCTCT ACATACAGTG CTCATTGGAG GTCCTCCACT      120
CGAG                                     124
```

(2) INFORMATION FOR SEQ ID NO:755:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 369 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCGGCC	TTCATGGCCT	AATCGGTGTC	TTTGGTAAAA	ATTCTATGAG	GAIGACATAT	60
TCCATCATGT	TATTCGTTTC	ACATTTCTTT	TTGCTCAGTC	TCCAATGCAA	GCACAGCTTG	120
TGGTATAACC	TATTGTTTTC	CCATTCTAAT	AACCTCTCAA	TCGATCTTCG	TGTTCTTTTA	180
CTGAGGCAAA	TAACGGGCA	CATACTGCAA	CCTAATGTGC	AGCAGCAACA	AAGGCAGCCA	240
CAAAGTAGCC	AACGTACATT	AACAGGAAGG	TTCTTCTTAA	GACAACTGTT	AACCTCTGTTG	300
ATGCTGGCTT	TAAATTCTTC	AGGAGCTACT	TTTTCAGTTA	ATGAAGAAGG	GAATTCAGAT	360
TCAAATTTG						369

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAATTCGGCC	TTCATGGCCT	ACCGGCGAGG	AATAGGAATC	ATGGCGGCTG	CGCTGTTCTG	60
GCTGCTGGGA	TTGCGCTGC	TGGGCACCCA	CGGAGCCTCC	GGGGCTGCCG	GCACAGTCTT	120
CACTACCGTA	GAAGACCTTG	GCTCCAAGAT	ACTCCTCACC	TGCTCCTTGA	ATGACAGCGC	180
CACAGAGGTC	ACAGGGCACC	GCTGGCTGAA	GGGGGGCGTG	GTGCTGAAGG	AGGATGCGCT	240
GCCCGGCCAG	AAAACGGAGT	TCAAGGTGGA	CTCGGACGAC	CAGTGGGGAG	AGTACTCCTG	300
CGTCTTCCTC	CCCGAGCCCA	TGGGCACGGC	CAACATCCAG	CTCCACGGGC	CTCCAGAGT	360
GAAGGCTGTG	AAGTCGTGAG	AACGCATCCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	ACTGATGTTG	AAGACGACAC	CACGGCTTTG	ATGGAATATC	60
AGATATTGAA	AATGTCTCTC	TGCCTGTTCA	TCCTTCTGTT	TCTCACACCT	GGTATTTTAT	120
GCATTTGTCC	TCTCCAATGT	ATATGCACAG	AGAGGCACAG	GCATGTGGAC	TGTTCAGGCA	180
GAAACTTGTC	TACATTACCA	TCTGGACTGC	AAGAGAATAT	TATACATTTA	AACCTGTCTT	240
ATAACCACTT	TACTGATCTG	CATAACCACT	TAACCCAATA	TACCAATCTG	AGGACCCCTG	300
ACATTTCAAA	CAACAGGCTT	GAAAGCCTGC	CTGCTCACTT	ACCTCGGTCT	CTGTGGAACA	360
TGTCTGCTGC	TAACAACAAC	ATTAACTTTC	TTGACAAATC	TGATACTGCT	TATCAGTGGA	420
ATCTTAAATA	TCTGGATGTT	TCTAAGAACA	TGCTGGAAAA	GTTGTCTCTC	ATTAAAAATA	480
CACTAAGAAG	TCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```

GAATTCGGCC TTCATGGCCT AACCAAATCA ACAACAACCT ATTTAGCTGT TCCCCAACCT    60
TTTCCTCCGA CCCCCTAACA ACCCCCCTCC TAATACTAAC TACCTGACTC CTACCCCTCA    120
CAATCATGGC AAGCCAACGC CACTTATCCA GTGAACCACT ATCACGAAAA AAATCTACC    180
TCTCTATACT AATCTCCCTA CAAATCTCCT TAATTATAAC ATTACAGCC ACAAACCTCG    240
AG                                                                    242

```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 221 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATAGCCT ACCTAAATTA ATAATAATGT ATAGTTCAGA ATTGCTAAGA    60
GTACTTTTTT TTTTTTTTTT TNGAGACAGG TTCTCGCTCT GCCCTCCAGC CTGGTGACAG    120
AGCAAGATTG CATCTCAAAA AAGAAAAAAA ACACACAGCT AATAGAATTG CCATTGTTTT    180
TCATAATAGA ATCTAGCTGC TTACTCCAAC CTCACCTCGA G                                                                    221

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GAATTCGGCC TTCATGGCCT AAAATCAAAG ACTTTGCCAA TACCATTCTT GGCCATGGAG    60
GCATCATGGA TCGCTTTGAC TGCCAGTATC TGATGGCCAC CTTTGTCAAT GTATACATCG    120
CCAGTTTAT CAGAGGCCCT AACCCAAGCA AACTGATTCA GCAGTTCCTG ACTTTACGGC    180
CAGATCAGCA GCTCCACATC TTCAACACGC TGCGGTCTCA TCTGATCGAC AAAGGGATGC    240
TGACATCCAC CACAGAGGAC GAGTAGGGGC CACCAGGGC CAGGAGAACA GGAACAGAAC    300
TGAGCAGGGG CAGGTCTCCA AGGCAAGCCC AGCTGGTGTG ACTTAGACAA TGACGAGGCT    360
TCAACTCACT GTCTTTTTTT TTTTTTTTGG GAGGGTATTT TTTATTGTG GGTTCAAAAA    420
ATCTGTATAT ACAGTCTATG TGTTTAGAAT TTGTGTTGTA AGTAAACTAC AGCTTTGAGT    480
TGGAAAGAAG TCACGGGTTG TAAAACCATT TGGATTTTTT TAAAACAAAA GTATTAATAA    540
TCTGGAAGAC TCGAG                                                                    555

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GGCCGATCAG GTTATTTTTT GAAAGTTTGA CTTACAGAGC ATATAAATTA CCCTTGGTTA	60
TTCTCAGCTG TGATTGAGTT CTGTGAAAGC ATAGTACCCT AGTACCCTGG GATATCTCTA	120
CATGTGAAAT TATTCAAATG TCTCCCTTAC TTTTITTTTT TTTTITTTTT AGACAGGCTC	180
TGTTGCCCAT GCTGCAGTGC AGTGGCACAA CTATGGCTCA TCTCAGCCTC GACCTCCTGG	240
GCTCAAGCGA TCCTCCACCC TCAGCCCCC AGGCAGCTGG GACCACAGGC ACACACCACC	300
ATGTCCAGCC AATTCCTGTA TTTT	324

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

GAATTCGGCC TTCATGGCCT AGTGCCGGGG AGAAAGGGCT TCCTCCCCCA CACATCAGAC	60
AGGGCACCAA TGAGTGGGGC ACTCAAAAAA GAGAGCAGGC CCTGGAGAGG AAACCAAAGC	120
AAAGGTTAGT TTTATAATCT GATCCCTCAA TTACCTGTAA TTCATATTTT CTAAATGCAT	180
TAGCTCTAAT TCATTGTACT GCCCCCAAAA CAGAATAATA CTTTGAAACA TTAAATACAA	240
ACTACAATA AAAAAATAAA ATTAGGCCTG GCGTGGTGGC TCATGCCTGT AATCCCAGCA	300
CTTTGGAAGG CCGAGGCGGG TGGATCACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

GAATTCGGCC TTCATGGCCT AATTGAATC AACACAACCA CCCACAGCCT AATTATTAGC	60
ATCATCCCTC TACTATTTTT TAACCAAATC AACACAACCC TATTAGCTG TTCCCCAACC	120
TTTTCCTCCG ACCCCCTAAC AACCCCTCCT CTAATACTAA CTACCTGACT CCTACCCCTC	180
ACAATCATGG CAAGCCAACG CCCTTATCC AGTGAACCAC TATCAGGAAA AAAACTCTAC	240
CTCTCTATAC TAATCTCCCT ACAAATCTCC TTAATTATAA CATTACAAC CACAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

GAATTCGGCC TTCATGGCCT AGGGATTAA AGAGTTTTTC TTGGGTGTTT GTCAAACCTT	60
TATTCCTGT CTGTGTGCAG AGGGGATTCA ACTTCAATTT TTCTGCAGTG GCTCTGGGTC	120
CAGCCCCCTTA CTTAAAGATC TGGAAAGCAT GAAGACTGGG CTTTTTTTC TATGTCTCTT	180
GGGAACTGCA GCTGCAATCC CGACAAATGC AAGATTATTA TCTGATCATT CCAAACCAAC	240
TGCTGAAACG GTAGCACCTC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC TTCATGGCCT ACCAACAGCA AGCTCCAATA TCACACATCC AGACTCCTAT	60
GCTTTCCCAA GAACAGGCAC AACCCCGCA GCAGGGTTTA TTTAGCCTC AGGTGGCCCT	120
GGGCTCCCTT CCACCTAATC CAATGCCTCA AAGCCAACAA GGAACCATGT TCCAGTCACA	180
GCACTCAATA GTTGCCATGC AGAGTAACTC TCCATCCCAG GAACAGCAGC AGCAGCAGCA	240
ACAGCAGCAG CAACAGCAGC AGCAACAACA ACAGAGCATT TTATTCAGTA ATCAGAATAC	300
CATGGCTACA ATGGCGTCTC CAAAGCAACC ACCACCAAC ATGATATTCA ACCCAAATCA	360
AAATCCAATG GCTAATCAGG AGCAACAGAA CCAGTCAATT TTTCACCAAC AAAGTAACAG	420
TCTCGAG	427

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

CGATTGAATT CTTGTCTGTT CTGCCTCACT CCCGAGCTCT ACTGACTCCC AACAGAGCGC	60
CCAAGAAGAA AATGGCCATA AGTGGAGTCC CTGTGCTAGG ATTTTTCATC ATAGCTGTGC	120
TGATGAGCGC TCAGGAATCA TGGGCTATCA AAGAAGAACA TGTGATCATC CAGGCCGAGT	180
TCTATCTGAA TCCTGACCAA TCAGGCGAGT TTATGTTTGA CTTGATGGT GATGAGATT	240
TCCATGTGGA TATGGCAAAG AAGGAGGGTC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC TTCATGGCCT ACGTAATTCT GGAAAAGTGA ATACTTGTGA AGAGTCGTCT	60
TGAATGATTT GTAAAAATC CTGTTCTTAT ATTCAACGAG TTTCGAATCT TTGTCAGAGG	120

```

AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAACTCC      180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC      240
CGATGTTCTT AAAAAATTTT ATGGGACTGC TTTTGGCAAC CAGCCCTATT TTGTTTTCAT      300
ATCCCTTTT GCTCCCATCT TTCCAAACTC ATAAACTCGA G                          341

```

(2) INFORMATION FOR SEQ ID NO:768:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT ACAGAAAGAG TTTGAGACCT GAATAGCTCC CAGATTTTCAG      60
TCTTTTCCTG TTTTGTGTTA CTTTGGGTAA AAAAAAAAAA AAGTCTGATT GGTTTTAATT      120
GAAGGAAAGA TTTGTACTAC AGTTCTTTTG TTGTAAAGAG TTGTGTTGTT CTTTCCCCC      180
AAAGTGTTT CAGCAATATT TAAGGAGATG TAAGAGCTTT ACAAAAAGAC ACTTGATACT      240
TGTTTTCAA CCAGTATACA AGATAAGCTT CCAGGCTCGA G                          281

```

(2) INFORMATION FOR SEQ ID NO:769:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACTAACGAGG AAAGGGATTT AAAGAGTTTT TCTTGGGTGT      60
TTGTCAAAC TTTATTCCTT GTCTGTGTGC AGAGGGGATT CAACCTCAAT TTTCTGCAG      120
TGGCTCTGGG TCCAGCCCTT TACTTAAAGA TCTGGAAGC ATGAAGACTG GGCTTTTTTT      180
CCTATGTCTC TTGGGAACTG CAGCTGCAAT CCCGACAAAT GCAAGATTAT TATCTGATCA      240
TTCCAAACCA ACTGCTGAAA CGGTAGCACC TGACAACACT GCAATCCCCA GTTTAAGGGC      300
TGAAGCTGAA GAAATGAAA AAGAACAGC AGTATCCACA GAGAGACTCG AG                          352

```

(2) INFORMATION FOR SEQ ID NO:770:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

GAGCGTGGTG GATATAAAAC AGGTAAGAGA CTTTCATGGT ATACCTTTAT ATTGTTGGAT      60
TAAAGGCACT GCCAACTCAA AAACTTAAC CGAAAATTTT TTTTAATCAG TTAAATATTT      120
ACTGATATGA AAATGACATG AACTAACTT TTTGTGTTTT ACTTAAAGGG TGCTCTGTTT      180
GAAACTTCCT CAGACAACTG AATGGGAGAA CCAGATGAAT TTAGTAAAAG TATTAACGTC      240
AAATATTTAT ACTGCTTTTT TTTGTTGTTT TGTTTTTGAG ACAGAATCTT GCTCTGTTGC      300

```

CCAGGCTGGT CTCGAG

316

(2) INFORMATION FOR SEQ ID NO:771:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GAATTCGGCC TTCATGGCCT ACTTTGATGG AATATCAGAT ATTGAAAATG TCTCTCTGCC      60
TGTTTCATCCT TCTGTTTCTC ACACCTGGTA TTTTATGCAT TTGTCCTCTC CAATGTATAT      120
GCACAGAGAG GCACAGGCAT GTGGACTGTT CAGGCAGAAA CTGTCTCTACA TTACCATCTG      180
GACTGCAAGA GAATATTATA CATTAAACC TGTCTTATAA CCACCTTACT GATCTGCATA      240
ACCAAGTTAA CCAATATACC AATCTGAGGA CCCTGGACAT TTCAAACAAC AGGCTTGAAA      300
GCCTGCCTGC TCACTTACCT CGTCTCTGT GGAACATGTC TGCTGCTAAC AACACATTA      360
AACTTCTTGA CAAATCTGAT ACTGCTTATC AGTGGAATCT TAAATATCTG GATGTTTCTA      420
AGAACATGCT GGAAAAGGTT GTCCTCATT AAAATACACT AAGAAGTCTC GAG              473

```

(2) INFORMATION FOR SEQ ID NO:772:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

ATACAGTAAT CAAAGTAAGT AATATTTCAA TCCAATATTT TTA AAAATCA GAATTAATGC      60
AAAAAAAACC ATGATGAACA AAATATTAAA ATTAAAAATA AAGACAGGAT TAGTATTACT      120
GAGTTTTCCT TTTGTCCAG GCTCTAATAT GGCTTGGCAT GGGGCAGAAC ATTACAACAT      180
ACCAAGTCGTG TCATGGTGCC CAAGGCTCCA CAGACCTCAG TGGCTCCCTG CTGCCTGCCA      240
CAGCAATCTC GAG              253

```

(2) INFORMATION FOR SEQ ID NO:773:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC TTCATGGCCT AGTGAGAATT GACTGTTGCT TTTGTTTGCC TGCTTACTGT      60
TTTCTTTTAT TTATTGTTT TTGGACCTGT GGCACAAAGG ATCTGTTTAC TGACCATCCT      120
TATTGTGAGG CACACAGTCA CCATGGCACC CTGCGCGTTA CTCCTGTTCC ACTTGTTTAT      180
TCTCTGTATC CCCATACTAG TTATTATCGA AACCATCAGC CTACTCATTC AACCAATAGC      240
CCTGGCCGTA CGCCTAACCG CTAACATTAC TACAGGCCAC CTCGAG              286

```


(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAGGCTGACA AAATACTCAC CTTTACCTTT ATTTTTCAT TTTATACTCA CAACCATATT      60
TTTTTTGGCC CCCTTCCCTT TATTTTAACT CATACTGAT ACTTAAAGGT GCTCTGCCTT      120
ATTAAATCAG CTCCTAGGCT GCAAGTGCAT AATATTTAAA AATTTGCAAC TTTGACTTTT      180
TAAAAATCTG GTCTTGGTAT GGAGCAACTT TGCCTTTTTT TTTTTTTTTT TTGAGACAGA      240
GTCTCGCTTT NTCGCCCAGG CTGGAGTGCA GTGGTCCCAT CTCAGCTCAC TGCAACCTCC      300
TCCTCCCGGG TTCAAGAGAT TCTCTGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGTG      360
CCTGCCCCAA CACCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GGCCTGGTAG GATAAGAATA TAAACTTCAG GGTGACCGAA AAATCAGAAT AGGTGTTGGT      60
ATAGAATGGG GTCTCCTCCT CCGGCGGGGT CGAAGAAGGT GGTGTTGAGG TTGCGGTCTG      120
TTAGTAGTAT AGTGATGCCA GCAGCTAGGA CTGGGAGAGA TAGGAGAAGT AGGACTGCTG      180
TGATTAGGAC GGATCAGACG AAGAGGGGCG TTTGGTATTG GGTATGGCA GGGGGTTTAA      240
TATTGATAAT TGTGTGATG AAATTGATGG CCCCTAAGAT AGAGGAGACA CCTGCTAGGT      300
GTAAGGAGAA GATGTTAGG TCTACGGAGG CTCCAGGGAA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

```

GAATTCGGCC TTCATGGCCT AAGAGGATAA GGAAGAAAA AGAAGAAAGT ATTCCATTCC      60
CACATCCCTT TAGGTTGGCT TCTTATTTTA TGTTTTGTG GGTGTGTTA TTTTGCTTTG      120
TTAACATTTT CACTAGCTA TAGAAACGTT TGCAATCTT ATTACTGATT AGCATTCCAA      180
AACITTGTAA TGAACATTTT TCTCTCTTC TTTTTTTTTT TTTTNGAG ACAGGGTCTC      240
GCTCTGTAC CAAGCTGGAG TGCAATGAGC CAAGATCCTA CTGCTGTCCA TTCCAGCCTG      300
GGTGACAGAA CAAGACCTTG TCCGCCACC TTCCACCCC CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

```
GAATTCGGCC TTCATGGCCT ACATGTTTAT TGAGCATTTA CTGTTTACCC ATCAGTATTC    60
TTGATGCTAA GGATATAGCA GTGAACAAAA CAATCCTTGT GGACTTACAT CATAGTAGGG    120
AAAATAGACA ATAAATAAAT GTATGATAAG TCAGTTGATA ATAAGTGCTA CGAAGTAAAA    180
CAAAGCAGGA ATAAAGTTGG GGAGAAAAGT GGAGGGTGAT TGCTATTTCA GTTGAGATCA    240
TTGGGATGGT CTTTCTGAG GAGGGGACAT TTGCATAGAG AAGCAAGGAT GTGAGTTATG    300
TGTCTGCTGT GTGTAGAACA TTCTGGGAAA GGCAGAGAA GGAACAAGA CTATTCCAGA    360
AAAAGAGGGC ACTCGAG                                         377
```

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```
GAATTCGGCC TTCATGGCCT AGCACAGCTA GACGGTTCCA GCTCAGGGTC TCTCATGAAG    60
TTGCAATCAA AATATTGGCA GGAGAGAAAA ACATATTTTC AGAAGCTGCA GGCATAGGAA    120
GACTTGGCTG GGGTTGAAGG ATCCACTTCC AAGATGGCGC ACTCAGTGGC TCTTGGCTGG    180
AGGCCTCAGT TCCCTGCTGC GTGGAGCTCT CCCTCCAGCT GCTTGAGTGG ACTCATGACA    240
TGCAGCTGGC CTCCCCTGGA GCAGTCGATC CAACAATGAG CATGGCCATG AACTAGAGCT    300
CGAG                                                         304
```

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```
GAATTCGGCC TTCATGGCCT AGCCAAAACC ACAGAATATA TAATATAGAT CTTGGGGATA    60
CAGCAGAGAA AAAAGACAAA AATCCCTGTT ACAATCCGTT CTAGAATTGA TGTTCCCTTG    120
TTGGTTAATT CAAGTTTGA TTTCAGAAAT CTTACCTCTT GGTGACTGCC TAGAGTGGCA    180
TTGGGCTGGA GGGGAGGAAC TGTTTCATGTT GGAAATGGGG AATGGGCCAA AAATGCAATT    240
GAGTAGGTTG ATTAAGTTGT CTGCTGTCAG AGTGAAGCA GGGGTAGTTT CCCTTTCCGA    300
CCAGAGGCAT CTCGAG                                         316
```

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

GAATTCGGCC TTCATGGCCT ACAGAAGATT TGGACAATTC CATTGATAAA ACAGAAGCTG	60
GAATTAAGGA GCTTCAGAAG AGTATGGAGC GCTGGAAAAA TATGGAAAAA GAACATATGG	120
ATGCTATAAA TCATGATACT AAAGAACTGG AAAAGATGAC AAATCGGCAA GGCATGCTAT	180
TNAAGAAGAA AGAAGAGTGT ATGAAGAAAA TCGAGAAGT TGGATCACTT CCCCAGGAAG	240
CATTTGAAAA GCACCAGGCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC AAAGAGGCCT AGCGATTGGG TCTTTGATAT CTGTAAGCCG TTGAATTAGC	60
CCTGCCCTCT GTTCTTAGTT TAGGAGACCA TAGATGTGCC CTTATTATTG AAACATGATT	120
TATTCAGTTA CTGAAGTTAT CTTACCTGAT ACATAATTTT ACCCATAGAA AATAATATGA	180
AAATAGCAAA ATCACTCAGG TAAGATAGAT GAGTGCCTGC TGTGTTCAAG AGACTGTTAA	240
TATGAGGCTC TGGGGCTGCA AAAAAATCAAG TTGCTAAGAA ATATGAGGTC AGAGCAGCAG	300
AAGTTCTGAG TAACCACTGA TTACTGGACT TGGGGTGATC AGAAGTGACT GTGTGGGAGA	360
GGTGAAATTG AGCAGACTCT GAAGGAACCT CTGGGTTTGG GTAAATAGGG AGCTGGGGAT	420
GAGGATGCCC CAGGTTTTAG AAAGAACACA GGCTGTTGAA TCACACCTGG GTTCAAACCC	480
TGGCTTGCTA CTCCTAGTT TGTGACCTTG TCAAATTCCT TGATTTCCTT TTTCTTTTTC	540
TTTTTTTAAT TTTGGAGACA ACAGTCTCGC TCTGTCACCC	580

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC AAAGAGGCCT AGAATGGTAG AGTAAAAAGA ACCCTCTGCT GAGTAACCAA	60
GCCTTTAATT TCCTGTTCTT GCTGTAGGGC TTTCACAAAT GCATTTTTC GCGGTTGGT	120
GTGTCCTCGA G	131

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

GAATTCGGCC AAAGAGGCCT AGATTGAGGT TGTGGTAGAT TAGGCGTAGG TAGAAGTAGA	60
GGTTAAGGAG GGTGATGGTG GCTATGATGG TCGGCTCGA GGCAGGTCTA GAATTCAATC	120
G	121

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

GAATTCGGCC AAAGAGGCCT AAGCAAGATG AAGCCCAACA TCATCTTTGT ACTTCCCTG	60
CTCCTCATCT TGGAGAAGCA AGCAGCTGTG ATGGGACAAA AAGGTGGATC AAAAGGCCGA	120
TTACCAAGTG AATTTTCCCA ATTTCCACAC GGACAAAAGG GCCAGCACTA TTCTGGACAA	180
AAAGGCAAGC AACAACTGA ATCCAAAGGC AGTTTTTCTA TTCAATACAC ATATCATGTA	240
GATGCCAATG ATCATGACCA GACCCGAAAA AGTCAGCAAT ATGATTTGAA TGCCCTACAT	300
AAGACGACAA AATCACAACG ACATCTAGGT GGAAGTCAAC AACTGCTCCA TAATAACAA	360
GAAGGCAGAG ACCATGATAA ATCAAAGGT CATTTTCACA GGGTA	405

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 642 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAATTCGGCC AAAGAGGCCT ACTACTCACC TCTTGCTCTC TCCCAACCAT AGAAACAGCC	60
ACGACTCCTA CCACAACTT GGGAAACACC ACCACTGAGA CCACCTCCA CAGTACTCCC	120
AGCTTCACTT CTTAGCCAT CTACTCCACC GTCAACATAT CCACAATAC CATCTCCTCA	180
TTTCCCCCTT CCTCAGGTAC CATGGTGACA TTCACAACCA TGAACCCATC CTCTCTGAGT	240
ACAGACATAT CTACCACCAC ACTGAAAAAT ATCACCAGC CTTCTGTGGG CTCTACTGGT	300
TTCTGACTG CAGCTACAGA CCTCACCTCA ACATTCACTG TTTCCACTTC CTCAGCAATG	360
TCCACAAGTG TCACTCCATC TGCCCCCAGC ATCCAGAATA AAGAAATCTC AACACTGTG	420
AGTACAACCA CTACCACCAG TCCCACTGAG AGAATGACTC TCACAAGTAC AGAGAATACC	480
CCGACAAGTT ACATCCTGAC CACCACTCCA GTGACATATT CATTTTCCCC TTCCATGTCT	540
GCCAGCAGTG ACTGGACCAC TGACACAGAG AGCATCTCCT CAGCTCCAGC CATCACCAGT	600
ACACTCCACA CAACAGCTGA ATCCACCTG GCAGGTCTAG AA	642

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC AAAGAGGCCT ATGGCCTTGG AAGGGATGAG CAAACGGAAG AGAAAGAGAA      60
GTGTCCAGGA GGGAGAGAAT CCTGACGACG GCGTTCGCGG GAGTCCGCCG GAAGACTACA      120
GGCTTGGACA GGTGCGCAGT AGCTTATTTC GCGGCGAACA CCATTCCAGA GGTGGCACCG      180
GTCGGCTGGC GTCCCTCTTC AGTTCTCTGG AGCCCCAGAT TCAACCCGTG TACGTGCCTG      240
TGCCTAAACA AACCATCAAA AAAACGAAAC GGAATGAGGA GGAAGAAAGT ACATCCCAGA      300
TTGAAAGACC ACTTTCGCAA GAACCTGCCA AAAAAGTGAA AGCGAAGAAG AAACACACTA      360
ACGCAGAAAA AAAGTTGGCA GACAGGGAAA GCGCTCTAGC GAGTGCTGAT TTAGAAGAAG      420
AAATTCACCA GAAACAAGGG CTTAGCTCGA GCAGGTCTAG AATTCAATG      469
```

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAT ATAAATCAGA GAAAAAGCAT GAAGCGTATC      60
ATATTGATTT TAACAGTATT GCTTGCCATG TTAGGGCAGG TTGCCTATGC GCAGAAAACG      120
TGTGTATCG CATCGGCAGA AAATCATGTG CCTATTCTGT AAGCACTTAT TCATACCAAT      180
AACAATCATT GGGCAAGAAC AGATTATCGG GGCTATTGGA CGATGCGCTA TCAGTTTGAT      240
TCAGCAACCG TATCGAAACC TGGTTTTATG AAGGCAACTA TCCGGTACAA GGAAGTCCG      300
GATACTCTGT TTCTCTTGCC GGATGCCAAA CAGTTAGGCG AAGTGACAGT TTGGGGCAAG      360
AATCAGGAAG GCATCAAAAA TATGGAAGAG GATATTCAGG AGAAGATAAA CTCTTTGCCA      420
ACTTCATCTG CTGGCATTGG TTTTGATGCT TTCGGATGGA TGGATAAACA GGGAAAACGT      480
GATAAGAAGC ATCTGCAACA G                                501
```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 122 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```
TGATGATCGA TATCCAGAAA GACACTGCGG TGGAAGGTGA GGAGATTGAA GTCAACTGCA      60
CTGCTATGGC CAGCAAGCCA GCCACGACTA TCAGGTGGTT CAAAGGGAAC GCAGAAGTCC      120
AG                                122
```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 274 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```
GGTGAGCTGA GATCGCACCA CTGCACTGCA AGACCCTGTC TCAAAACAAA CAAACAAACA      60
ACAACAACAA CAACAAACCA AACCAACAA AAAACCTGCA TAGCCAATA GACCAGCATA      120
GAGGGCGAAA ACCATGCTTT TTGTCAAATG GTACTGTTTA TTCTGTTTTG CTGTCAGCTG      180
GTTTGCCGCT TCTGATAAAG CTAGCCCTTG CTGTGTGCAT GCAGGTATA GTGCCCAGGC      240
TCATATTTC TCTTCTTGCT GCACCTCACT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

```
GAATTCGGCC TTCATGGCCT AGGGAAAGGA GGCGGCAGCC AGGCTGTGTC CCCTGACCGT      60
TGGAGCGTCT GCGACCCCG CATCCCCGCA CCCTCAAGGC ACCTCCAAAG ATGATGATGG      120
GTTGTGGGGA GTCAGAGCTG AAGTCGGCGG ACGGGGAAGA AGCCGCGGCG GTCCCGGGGC      180
CACCCCCGGA GCCCCAAGTC CCGCAACCG                                209
```

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

```
GAGAGAATTA AAGAGAACCA CNAAGCTGAA CCTCAAAAAG TTAGCCTGGC GAGGGGAGGA      60
TGATGAGATT TCCCCTGTTG TCACATAAAC AAGGAAGTAA AGGGGGCCCC TTGTGCTCTC      120
AGAACTCCAA GCATGAAACG ATAGCAAAGG GAAAAACAGC TAAGTGTTC CTGGCTGAAT      180
TTTATTTTGC TTTCAGTTTC TGCCATTCA GTTCCTGTTA TCGTGCTTTG AGGTGCACTG      240
AACTGCAGCA AATCCAGGGG ATCCAAGGCT ACGTTGAAAA GCCTTTGACC ACAGTGCAGG      300
GAGCAGAAGA CATTAAATGAC GTGATGTCGA CACAGCCCGC ACTCAGGATC CTCCAGGAAA      360
AGAACACAGA GATAACCCCG GAACTCGAG                                389
```

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GTGCTTTGGA TTTTGCATCC AGCTTTTTCT CAACACCCCC GCTGGAAGTC AGCGGCTCCA      60
TCTCTTCGCC TTCGGAAGCA CCTGCGTCTC TGTCTCTGAT GCCGAGTGAC TTGTCCCCCT      120
TCACATCTCA GTCTTTTTCT CCCTTGGTTG AGACATTTAC ATTGTTTGAC TCTAGTGATC      180
TGCAGTCATC TCAGCTGTCT CTTCCAGTT CCACAAATCT TGAGTTTTCG CAGCTCCAGC      240
CAAGTTCCGA GCTGCCTTTA AACACCATCA TGTTGCTACC TANCCGTTCT GAGGTGTCAC      300
CATGGTCAAG CTTCCCTTCT GATTCTCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC TTCATGGCCT ACTGGAATTT CTTTCTGCC CTTTCATATT TTAAGATGGC      60
TGAATAGCA CAGGGAGTAT ATAGCAGATA TCTTCTGGGA AATAATTCAT CTGAGGATAG      120
CTTTTATTT GCCAATATTG TGCAACCTCT GGCAGAACT GGACTACAAC TCTCCAAACG      180
AACTTTCAGT ACTGTACTAC CACAGATTGA TACTACTGGA CAGTTGTTTG TACAGACTCG      240
GAAAGGTCAG GAAGTTCTCG AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT      60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTTGTTCTGGG TTTTCCACAG CGGTGGTGAC      120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG      180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA      240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAATTCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```

GCGATTGAAT TCTAGACCTG CCTCCAAGCA GCTGCAGTAT CTCGGAAGAA AAAACGAAGA      60
ATGGGAACCT ATAGCCTGGT TCCTAAGAAA AAGACCAAAG TATTAAACA GAGGACGGTG      120
ATTGAGATGT TTAAGAGCAT AACTCATTCC ACTGTGGGTT CCAAGGGGGA GAAGGACCTG      180
GGCGCCAGCA GCCTGCACGT GAATGGGGAG AGCCTGGAGA TGGACTCAGA TGAGGACGAC      240
TCAGAGGAGC TCGAG                                     255

```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```

CTAGTCTTCC AACCCCTTCTG GACTTTCTTT GCTCTTGTCT TGTTTTGGGT GTACTGGATC      60
ATGACACTTC TTTTCTTGG CACTACCGGC AGTCCTGTTC AGAATGAGCA AGGCTTTGTG      120
GAGTTCAAAA TTTCTGGGCC TCTGCAGTAC ATGTGGTGGT ACCATGTGGT GGGCCTGATT      180
TGGATCAGTG AATTTATTCT AGCATGTCAG CAGATGACAG TGGCAGGAGC TGTGGTAACA      240
TACTATTTTA CTAGGGAAGT ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 185 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```

GAATTCGGCC TTCATGGCCT AGGGGGAGTT TAGCTGAAAC AAGTTTACA GAAGCAGAGC      60
TGGCAATAG TTAATATATT AATTGGTTAC AATAGCAGTT ACAAACAAC TAAACAGTTC      120
CAGGTGCAGG GGCTTAACT ATCACAAGA GAGAAATGCA GGGGTTTGC GTGACATTCA      180
CCGAG                                     185

```

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

```

GGGCGTGTGA CGACTGCTGG GAGAGGAAAG CGAGACATCA TTCCAACCCT CCAGAAGCTA      60
AAGATCCTGG AACTCAAGGG GAAACTAAC GTAAGTGCGA AAGCGAACAA GCAAACATGT      120
CCTCAACGGG GCAGGCAGGC TGTCGGGGTA CAGAGCTGGG ATCTGGGAAG GAACAGAGAG      180
GGCCGCTCAG GGAGAGGAAG CACAGTGCCA CCGGAGGCAC GCACTCAGCA GGCCTCGCA      240
GGCTGGGCAG AGGTAGAGAA GCAGCGCTGC ACAGGCAGGC AGCTGACCCA GGGCTCTTAG      300

```


AGCCGGGCAG GAGAGCTGGT GTGGGACCTG GGAGGAGGAC AGGAGCCTTC AAAGCAGCAC	360
CGCCTGATTG CAGCCAGGAG GGTAGCATCA AGGAAGATGG AACTGCGGCC AGGCCACATC	420
CAGGGGTGCT CGAG	434

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAAAAGTCGG ATGCTGGCCT CTGGAAATCA GCCAGATCAA GATATTACAC ATTTCTTCCA	60
ACAGATCCAG GAGCTCAATT TGGAAATGGA AGACCAACAG GAGAACCTAG ATACTCTTGA	120
GCACCTGGTC ACTGAACTGA GCTCTTGTGG CTTTGCCTG GACTTGTGCC AGCATCAGGA	180
CAGGGTACAG AATCTAAGAA AAGACTTCAC AGAGCTACAG AAGACAGTTA AAGAGAGAGA	240
GAAAGATGCA TCATCTTGCC AGGAACAGTT GGATGAATTC CGGAAGCTGG TCAGGACCTT	300
CCAGAAATGG TTGAAAGAAA CTGAAGGGAG TATTCCACCT ACGGAACTT CTATGAGTGC	360
TAAAGAGTTA GAAAAGCAGA TTGAACACCT GAAGAGTCTA CTAGATGACT GGGCAAGTCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GAATTCGGCC TTCATGGCCT AGGGGTGCTG TGTGTTTTTC AGGGCGCCCT GCGTCCGGCA	60
GAGGAGGCGA GCATCCCGCT CAGGTGATGA GGAACCCCTC GCGCACCCAG CGCAGAAGGC	120
TGCTGCCGCC GGACGCCTCC ATTGTTTGAC CACAACAAGG GCCGGATTCT CACCCAGCAG	180
GATCCTAAGG CCTTTGTAGT CTTTCAGCCA CTGTGGGCCC TGCCTCTGCC TGTTCCTCTG	240
GAATGTCTTG GGGGTTTTGA TCCTGTCACT GTGACCTGCA AATCCAAGAG ACAACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAGAAATCAG TGAAGGATTT GCAACGCTGC ACCGTTTCTC TAACTAGATA TCGCGTCATG	60
ATTAAGGAAG AAGTGGATAG TTCCGTGAAG AAGATCAAAG CTGCCTTTGC TGAATTACAC	120
AACTGCATCA TTGACAAAGA ACTTTTATTA ATGGCAGAAA TGGATAAAGT TAAAGAAGAA	180
GCCATGGAAA TCCTGACTGC TCGTCAGAAG AAAGCAGAAG AACTAAAGAG ACTCACTGAC	240

CTTGCCAGTC AGATGGCAGA GATGCAGCTG GCCGAAGTCA GGGCAGAAAT TAAGCACGGT 300
CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GCTCGCGGCC GTTCAGAATT ATAAGGCTGT CTGCAGAGAT TTGAAAAATG GCAACAAATG 60
AAAGTGTCAG CATCTTTAGT TCAGCATCCT TGGCTGTGGA ATATGTAGAT TCACTTTTAC 120
CTGAGAATCC TCTGCAAGAA CCATTAAAA ATGCTTGGAA CTATATGTTG AATAATTATA 180
CAAAGTTCCA GATTGCAACA TGGGATCCC TTATAGTTCA TGAAGCCCTT TATTTCTTAT 240
TCTGTTTACC TGGATGTCTC GAG 263

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCGGCC TTCATGGCCT AAATAGTTAG TCACCTTCTG ACCTTCTCCT CTTTCTCAAA 60
GCCTTCTGTC CCTGGTTTTT GCAAGTGCTG CATTTCGCC GAGAATCCGC GTTGCCCTACT 120
GCTGCCACCT CCTGTTTCATT TAGAACTATG CAAAGACTCC GCTTCCGTTT TCCTGAGCTC 180
CTCGGGCCCC AGAGTCTCTG TTTGATTATT TATTTATTTA TTTATTTATT TGCCAAAAAT 240
TCTCCTCTTC AACTTATAGA ATGCACCCAA CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

GAATTCGGCC TTCATGCCTA CAGCCATATT AAAACTAAGT AAAGTCTGCC CTGGGAACCTA 60
CACTTTCAGC TTGACTGTAG TAGACTCTGA TGGAGCTACC AACTCTACTA CTGCAACCT 120
GACAGTGAAC AAAGCTGTGG ATTACCCCCC TGTGGCCAAC GCAGGCCCCA ACCAAGTGAT 180
CACCCTGCCC CAAAACCTCCA TCACCCTCTT TGGGAACCCAG AGCACTGATG ATCATGGCAT 240
CACCAGCTAT GAGTGGTCAC TCAGCCCAAG CAGCAAAGGG AAAGTGGTGG AGATGCAGGG 300
TGTTAGAACA CCAACCTTAC AGCTCTCTGC GATGCAAGAA GGAGACTACA CTTACCAGCT 360
CACAGTGACT GACACAATAG GACAGCAGGC CACTGCTCAA GTGACTGTGA TTGTGCAACC 420
TGAAAACAAT AAGCCTCCTC AGGCAGATGC AGGCCAGAT AAAGAGCTGA CCCTTCCTGT 480

GGATAGCACA ACCCTGGATG GCAGCAAGAG CTCAGATGAT CAGAAAATTA TCTCATATCT 540
CTGGGAAAAA ACACAGGGAC CTGATGGGGT GCAGCTCGAG 580

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

CAAATTGATT TCGGCACAGT TCTGGGAGCT GGGACATTCA AGGTCACCAC GTTGCCACCT 60
GTGAAGGCCT TCTGCTGCAT CCTCATGTTG GGAAGATCA GAAGTGAGAA CACATGCTGG 120
CCAGTCCTTT CACAGCAGCA TCAATCCGTG CATGGGGCAG GGCCTCGGC CTGAGCGCCT 180
CCCCAGGCC CTAATCCCA GCACTGCCCT GCTGGGGATG GAATTCCAA CATGAATCTG 240
GGGGATGCTT TCGGACCACA GCCGGGGAGC CTGCCCTGGC TTCCAGCTGC TGGTGGCCCA 300
GGGGCTCCCT GGCTTGCCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

GCGATTGAAT TCTAGACCTG CCATTCTCGC TGTGCCGACG TTGACTCTCT CTCTGAATCC 60
AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCCA GAAGCCCAGC 120
CATCTCCAG GGGGCCCTCA TCGCCATCGT CTGCAACGGT CTCGTGGGCT TCTTGCTGCT 180
GCTGCTCTGG GTCATCTCT GCTGGGCCTG CCATTCTCGC TGTGCCGACG TTGACTCTCT 240
CTCTGAATCC AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCACT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AGATATGAGA AATGAGTGTT GGACGTCGAA GAATAAAGTT 60
GTTGGGTATC CTGATGATGG CAAATGTCTT CATTATTTT ATTATGGAAG TCTCCAAAG 120
CAGTAGCCAA GAAAAAATG GAAAAGGGA AGTAATAATA CCCAAAGAGA AGTCTGGAA 180
GATATCTACC CCTCCGAGG CATACTGGAA CCGAGAGCAA GAGAAGCTGA ACCGGCAGTA 240
CAACCCATC CTGAGCATGC TGACCAACCA GACGGGGAG GCGGGCAGGC TCTCCAATAT 300
AAGCCATCTG AACTACTGCG AACCTGACCT GAGGGTCACG TCGGTGTTA CGGGTTTAA 360

CAACTTGCCG GACAGATTTA AAGACTTTCT GCTGTATTTG AGATGCCGCA ATTATTCCT	420
GCTTATAGAT CAGCCGGATA AGTGTGCAAA GAAACCTTTC TTGTTGCTGG CGATTAAGTC	480
CCTCACTCCA CATTTTGCCA GAAGGCAAGC AATCCGGGAA TCCTGGGGCC AAGAAAGCAA	540
CGCAGGGAAC CTCGAG	556

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GGAACTTCT AAACATTTTT GCTCGCAACT TTTACAACAT GAGAATGTTA GCCTTATTG	60
TCGCATTTGC TATCAATTTT ATCTTGCTCT TTTATAAGGT CTCCACTTCT TCTGTGGTTG	120
AAGGAAAGGA GCTCCCCACG AGAAGTTCAA GTGAAAATGC CAAAGTGACA AGCCTGGACA	180
GCAGTCCCA TAGAATCATC GCAGTTCCT ATGTACTAGA GGAGAGCAGC GGCTACATGG	240
AGCCCACGTT GCGTATCTTA GCTATTCTGC ACACGGTCAT TTCTTTCTTC TGCATCATTG	300
GATACTACTG CTTGAAAGTC CCATTGGTTA TTTTAAAGCG AGAAAAGGAA GTGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GAGANACGAC AATGTCCAGG AAACAGAACC AGAAGGATTC ATCAGGATTC ATTTTGTATT	60
TGCAGTCCAA TACCGTACTG GCCCAGGGAG GAGCTTTTGA GAACATGAAA GAGAAGATAA	120
ATGCGGTACG TGCAATAGTT CCTAATAAGA GCAACAATGA AATTATCCTG GTTTTGCAGC	180
ACTTTGATAA CTGTGTGGAC AAAACAGTAC AAGCATTCAT GGAAGGTAGT GCCAGTGAAG	240
TACTCAAAGA ATGGACAGTA ACAGNCAAGA AAAAGAACAA AAAGAAGAAG AAACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

GAATTCGGCC TTCATGGCCT AGTAGCTGTT CCAGTACAAT TCAATGTTAT CCAGGTTGGG	60
TGCATGTGTA ATGATATTTT TGTACTTTTG TATCAACTCA GAATTTCCAG AGAGCTCTTC	120
CTGGCTGAAA AGATGTCCAA GGATCATCTC CGGAATGGAA GAGGTGAGGC CTGTTAGCTT	180
GTGGGCTGCC CAATCCATCC AACCCTTGGC ATTGGGATCA ATGTTGATGA GGACAAGACC	240
TTCAACAGTG TCCGGGTGGT TAAGAGCATA TCTCGCCAGG ATGTAGGCTC CAGCTCCAAC	300

ACCAACTCCA ATTATTGTAG AGAAATTAG GTACTGCAGG ACGCAAGGGA TCATGTCTGC 360
AAGCTGGTCC AGAGATGGGT ACTGATATCC CAAAGGGAAC ACAGGGGCTC GAG 413

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

TTGGTATTGT CTCTGTACTA GTCTTTCCAA ATTCTGCTGT GAGCTTTTTG CTTAGACTGT 60
AAGCCTTAGA GTCACATCATC ACAGTAATCC TAAAGACAGA T3TTTCTGTT CTATTTGATA 120
AGGCCTTTTT GTGGGTGTGT CCGACTGTCA GTTTCATGTT TGTTTGTTTG TTTTGGAAC 180
GCAGTTACAT CCAGGAGACC TGTGGTGAGC ATAATGGGCT GTAGTTTGTT CAGTTGTCAG 240
TATAGCTTGT TAGGGAGCTC TTCCTGGGCA GAGTCTTGCA CAGCAGAGCC CAGTCTGAG 300
CTGAGTTCTT GGCACCATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

ACATTTCTTT GTAAGTTNNN AAAAGCCTAT GAGGGTTTTT TCCACGATTC CGTTCCAGT 60
TTGGCTTTTG TTGTTGTGT GGCTGTTCTT GGCCCCCTG GGCCTGCAG TGGAGTGGGG 120
GGCTGCACCT GGGAGCCTCG AGCTGAGGCC CAGCCCCCTC TGCCCTGCAT TTTCTGCCA 180
AGCAGCACCT GAGACTCTGA AGCCGATGCC TATACAGGCA GAAACCTGCC AATTCCAGCT 240
TGAACGACTG GAGGGTCCTG AGGATGGGGG TCCCTGGGGT GCCATCATGG GCAGGTGCA 300
TCTGTTTGGG TATGCTGCCC CCCAGCTGGC GGGGCACCGG GGACAGCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GAATTCGGCC TTCATGGCCT AGGGAAGGG AANGTGGGGA GGGTCCGAGG GGAAGGGGAC 60
CCCAGCTTCC CTGTGCCCGC TCACCCCACT CCACCAGTCC CCGGTGCGCA GCCGGAGTCT 120
CCTCTCTACC GCCACTGTCA CACCGTAGCC CANATGGATA NCACNGTTGT CAGACAAGAT 180
TCCTTCAGAT TCCGAGTTGC CTACCGTTG TTTTCGTTGT TGTGTTGTT GTNTTTNTTT 240
TTNTTTNNN TNCGGAAGAC AGCAATAACC ACAGTACATA TTA CTGTAGT TCTCNATAGT 300
TNCACATACA TTNATACCAT AACCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCGGCC	TTCATGGCCT	ATCCATTTC	AAATCCACCA	AGGTCCAGTC	GACAGACATT	60
TCCAAAAAGA	ATCCTGTTCT	AGGACCACTT	GCGCTGAGAG	CACACCCGGG	GGTCAAAGGG	120
CAGCCACCGG	GGGTCAAAGG	GCAGCCATCA	GCTACTCCCC	AGGGAAGGGC	TTGCGGCCAC	180
CAGTCACTGC	AACCCCGCCT	CACCTCCGAT	GCCTGCTGTG	CCCAGGGTGG	TCCCGCTCAT	240
AGCGACGGCC	TGNGCGTNCA	TANGACCTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GATTGAATTC	AATGTTAAGC	ACCAATGCTG	GATTGTTGGTGG	TGGACTGAAC	ACCAGTGCTG	60
GCTTTGGTGG	TGGCCTAGGC	ACCAGTGCTG	GCTTCAGTGG	TGGCCTAAGC	ACAAGTTCTG	120
GCTTTGATGG	TGGGCTAGGT	ACCAGCGCTG	GCTTCGGTGG	AGGACCAGGC	ACCAGCACTG	180
GTTTTGGTGG	TGGACTGGGC	ACCAGTGCTG	GCTTCAGTGG	CGGACTGGGC	ACCAGTGCTG	240
GCTTTGGTGG	TGGACTGGTC	ACTAGTGATG	GCTTTGGTGG	TGGACTGGGC	ACCAATGCTA	300
GTTTCGGCAG	CACACTTGGC	ACCAGTGCTG	GCTTTAGTGG	TGGCCTCAGC	ACCAGCGATG	360
GCTTTGGCAG	TAGGCCTAAT	GCCAGCTTCG	ACAGAGGACT	GAGTACCATC	ATTGGCTTTG	420
GCAGTGGTTC	CAACACCAGC	ACTGGCTTTA	CTGGCGAACC	CAGCACCAGC	ACGGGCTTCA	480
GTAGTGGACC	CAGTTCTATT	GTTGGCTTCA	GCGGTGGACC	AAGCACTGGT	GTTGGCTTCT	540
GCAGTGGACC	AAGCACCAGT	GGCTTCAGCG	GCGGACCGCT	CGAG		584

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GAGAATGTCC	AGCAAGGAAG	TGAAGACTGC	TCTAAAAAGT	GCTAGAGATG	CAATCAGAAA	60
CAAAGAATAC	AAAGAAGCTT	TGAAACACTG	TAAGACAGTG	TTAAAGCAAG	AGAAAAATAA	120
CTATAATGCC	TGGGTTTTTA	TGGCGTTGTC	TGCAGCTGAA	CTAGAACAAC	CTGATCAGGC	180
CCAGAGTGCC	TATAAAAAAG	CTGCTGAATT	AGAGCCAGAC	CAATTACTAG	CTTGGCAGGG	240
GTTAGCAAAC	TTGTATGAGA	AATATAATCA	CATAAATGCT	AAGGATGACT	TGCCTGGTGT	300
TTACCAAAG	CTCCTGGATC	TTATGAGAG	TGTTGACAAG	CAGAAGTGGT	GTGATGTCTG	360

CAAGAACTT GTGGATCTAT ATTACCAAGA AAAGAAACAC CTAGAGGTGG CTCGAACATG 420
 GCACAAGTTG ATAAAAACAC GGCAGGAACA AGGTGCAGAA AATGAAGAGC TTCATCTCGA 480
 G 481

(2) INFORMATION FOR SEQ ID NO:817:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC TTCATGGCCT AGGGGGAGTG GTGGGTATTG CTAAGTTATC AGTTATTTAA 60
 CCTTATGGAG TTTTATTTAA CCGTTTTTGT TTGACATGTT TTATATATAT GTAATTTTAT 120
 TTATTCTTCA CAAATCCCT GTGAGGGGGG TGGTACTATT GTCCCATTT AAAGATGAGA 180
 AACTGAGGC ATGTCTAGAA TTCATCGAG 209

(2) INFORMATION FOR SEQ ID NO:818:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GGCTCTGTGG AATTCCATGG CATCTTCCCC GCCCCCCCCA ACCCCCCCCT TTCCCCCTTC 60
 TTTTTTTTTT TTTCTTTTCT TTTCTCCCCT CCCCCCCTT CACCATTTCCT CCTCGGAGGC 120
 GCTTTCCCCG GGCAGGGGCA GAGCCGGTCT CCCCCCCGCG CTCTCCCCGG CCCCCGCCGC 180
 CCTATGGCGA GAGGGAGCCC CCTCCCAACC CGGGCTCGAG 220

(2) INFORMATION FOR SEQ ID NO:819:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCGGCC TTCATGGCCT ACACATTCTT TTAGTCAGAA ACATTAAAAT AGTAGAGTAA 60
 GTTGGCTTGA AGTGAATTTT TGTGTGAAAT CTTTCTCTG CCCTAGCCTA GTTGTGCCAT 120
 GCACATTTGC ACACAGGAAG AACATTTTGA GACCTGCCAG AATATGCAAT GACAGGGTAA 180
 AAAATGCCGG AGGTTGACTG TGTTCATAGA CATGTGCTA AACACTCAAC ACTCCTGATC 240
 AACTGAATG CTTTGTACAG TCCTGTGAAT TGAGGGCTAT TATTATCCCC ATTTTATATA 300
 TGAGCGAGCA GAGGCCGAGA CAGATTACA AAGGTGCTCC CTCGAG 346

(2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```
GCTTATACAG TGTCCGATAG ACACCAGGAA GCNACTAGCA GAGAATTGG TAGTCATAGG      60
TGGCACTTCT ATGTTGCCAG GATTTCTCCA CAGATTGCTT GCAGAAATAA GGTATTGGT      120
AGAAAAACCA AAATATAAAA AAGCACTTGG CACTAAGACA TTTCGAATTC ATACTCCACC      180
TGCAAAAGCT AATTGTGTGG CCTGGTTGGG AGGGGCTATT TTTGGAGCAT TACAAGATAT      240
ACTTGGGAGC CGTTCGTGTT CAAAGGAATA TTATAATCAG ACGGGCCGTA TACCTGATTG      300
GTGTTCTCTC AATAACCCAC CTTTGGAAAT GATGTTTGAT GTCGGGGAAC TCGAG          355
```

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```
GCTCGAGGGC GAAGGGGAGC AATGGCATT TCGTTGGCCA TCCGTGACAC GGCATCCTAT      60
GCTCGCCAGA TGATGTTTAC GACCACCCTT CTCATTGTGT TCTTCACTGT CTGGATCATT      120
GGAGGAGGCA CGACACCCAT GTTGTCTATG CTTAACAATCA GAGTTGGCGT CGAGGAGCCC      180
TCCGAAGAGG ACCGAATGA ACACCACTGG CAGTACTTCA GAGTTGGTGT TGACCCCGAT      240
CAAGACCCAC CACCCAACAA CGACAGACTC GAG                                273
```

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

```
GAGATAAACA AAATTGATTG CCCATTCTC TCACTTCCCC ATCTTGCTTT CCTAGACCCC      60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCAGAAC ACTTGATATAT TGTTTGTTTG      120
AGGTTTCGTG CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA      180
TATCACTGT AAATTTTATT TAATCTGTTT TTTGTTTGT TTGGGGGTTA TTTGGGGGGA      240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG          286
```

(2) INFORMATION FOR SEQ ID NO:823:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

```
GGTCTGGAGG AGGCCCGGAG GGGCTGTGGG TGGACCACTG CAGTAATCTG GGTGAAAGAT   60
GATGATAGGC TAGACTAATA TGGTACCAGA GACAAAGAAG AGGGACTTGA GAGTTATTTA   120
GGAGGAAAAA AACAAAAACA AACAAAAATC AACCAGACTT ACGTTTTGAA ATAGGACAAG   180
TGAGGAAAAG GAGGGTTTCG AGAATAGCTT ATAGTTTTTCG AGAAGATGAG GTTGGACAAG   240
ATGCCACTGC TTTTCTTAGC ACTCTTCCCT CCCCTAAACC ATCCCGTAGT GCTCGAG     297
```

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

```
GAATTCGGCC TTCATGGCCT ACCCTCATT A C C C C A A G T G C C T C T A A T G G A T C T G T C C T T   60
ATTCTTCCTT GTTCTGTCTC CCTCATGCCC TGGAGCTCCT CTCTTTGGGA CCTTCCTCTC   120
CCAAGTCACC ACCCTCTCTC CCCTTCTACC ACTCAGCCAT TCCCCAGTTT CCACAGTTCC   180
TCAACATTA CCCCACTCCC CACTCCCCAG TTTCTCCCC CTCCCCATT GTCCCCCTCA   240
CCTGGGGGTC CCCGAAGTAG ATCTGCAG                                     268
```

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```
GAATTCGGCC AAAGAGGCCT AGATGTGAGC TGGGGAAGGG AGGGTGGCCA GTAATGGGTT   60
TGTTATCAAG CAGGTTTGTT ATCACTGTGG GTGACAAGCC CCTTCCCAT TGGGGCCTCT   120
GGGATCCAGT GCAGAACATA TCCCTCGCAG GAGATGAGGA ACTGGGGTGT TCACAGAGTA   180
ATTCCCTCCC TCACTAGTTG AGGGCTGCCT CTGGGGGTGG CTGAACTACC TCATGCAGCC   240
AGAGAAAGTC CTCAGGCAAT GAAATACAGA CACTGGCCAG CCAGCACTGA GGTGGCGAGA   300
CCTTACTGGC TGGTCCCCAG AGTGTCTGCA GCATTGTGTG AGATCTTAA CTGGCTAGAA   360
GGACGGTAAC AGCAGCACCT GTTCATAGG ACGTGAAGAT AGACGAGACA G                                     411
```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GAATTCGGCC AAAGAGGCCT ACTAAAACCA TAATTGCTTG TTTTGCCTG TATCTGTCTT	60
TTCACGAACA TTTTGAGTTT AGCTCTGTCT TACATTCCCA TCCCTAAAGA TCATCAGGAC	120
TTTTGTTTTC GTGACAATGC TGGGACCAGA TTGGCCTTCA TCATCTCATA ACACCCTTAT	180
TTCTATGGA AAAGTAAAT TGAATTATTC CAGATATGAT GACTTTAGGA TATCCTTTTC	240
CCTCTTGAC ATCCTTCATT GTATTGTGT TTTCCCTTTG GTCTCCAACG TCCCCACCAC	300
CCCCAATCCC TCCACGACTT TTAAGCCCTT GGAAGCCAAC TTGATTAGTC AGG	353

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC AAAGAGGCCT ACCGTGAGTT CCCAGGGTGG CCGGGAGGGG GAGCTGCGGG	60
GTTACAGCG GCTCCTCTCA ACGTTCCTGG CTCGGCTCCC GACTTCTCAG CCCTGCCTGG	120
AGGGGCTCAG CCACTGCTTT TAGCTGTCTG CTGGCTTTCC ACCCTTCCAG CCTGAACCTT	180
GACTTCCCA TGAGGCCTTC CTGTGGCGGG GACACTCCAG GTCGCTGCAC CCCTTCTCTC	240
CTGAATTCT GTAACGACAT CTAACTTTA TTTAATTAAT TTATTTATTT AGAGATGGAG	300
TTCTCTCTT GTTGCCCCGG CTGGAGTGCA ATGGCACCAT CTTGGCTCAC TGCAACCTCC	360
GCCTCCAGG TTCAAGTGAT TCTCCTGCCT CGGTCTCCTG AGTGGCTGGG ATTGCAGGCA	420
CCCATCTG	428

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC AAAGAGGCCT AAGCGGTATT TCAGCCACAG AGTTGGTGTT GGGTTTACTT	60
ATCTATTTTG AATTAAAAG GCTTATAAAT AAAGCAGTGA CACTGCTTAC TGGGAAATGC	120
TGTACCAAAA AATGTTATCT TGCT	144

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCGGACTAG GAGTCAATAA AGTGATTGGC TTAGTGGGCG 60
 AAATGTTATG CTTTGTGTT TGGATATATC TGGAG 95

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AGTGGCTACC TAAATTGAGT ATCTGGCAAG AGTAAGATTA 60
 AGCAGTAATT TGTTCCAAAG AAGAATCTTC TACCAAGGAG CAACTTTAAA GAATGAAATT 120
 AACTTTCTTC TTGGGCCTGT TGGCTCTTAT TTCATGTTTC ACACCCAGTG AGAGTCAAAG 180
 ATTCTCCAGA AGACCATATC TACCTGGCCA GCTGCCACCA CCTCCACTCT ACAGGCCAAG 240
 ATGGGTTCCT CCAAGTCCCT CACCTCCCTA TGAATCAAGA CTTAATTCAC CACTTTCTCT 300
 TCCCTTTGTC CCAGGCGCAG TTCCACCATC TTCTTTCTCT CGATTTAGCC AAGCAGTCAT 360
 TCTATCTCAA CTCTTTCCAT TGAATCTAT TAGACAACCT CGACTCTTTC CGGGTTATCC 420
 AAACCTACAT TTCCCACTAA GACCTTACTA TGTAGGACCT ATTAGGATAT TAAACCCCC 480
 ATTTCTCCT ATTCTTTTT TTCTTGCTAT TTACCTTCCT ATCTCTAACC CTGAGCCCCA 540
 AATAAACATC ACCACCGCAG ATACAACAAT CACCACAAAT CCCCCACCA CTGCAACAGC 600
 AACCACCAGC 610

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC AAAGAGGCCT AGGAAGAAAC AAGAACAAGA AAAAAGATTA TATTGATTTT 60
 AAAATCATGC AAAAAGTCA ACTCTGTGTT TATATTTACC TGTATTATGCT GATTGTTGCT 120
 GGTCCAGTGG ATCTAAATGA GAACAGTGAG CAAAAGAAA ATGTGGAAA AGAGGGGCTG 180
 TGTAATGCAT GTACTTGGAG ACAAACACT AAATCTTCAA GAATAGAAGC CATTAGATA 240
 CAAATCCTCA GTAACTTCG TCTGGAAACA GCTCCTAACA TCAGCAAAGA TGTATAAGA 300
 CAACTTTTAC CCAAAGCTCC TCCACTCCGG GAACTGATTG ATCAGTATGA TGTCCAGAGG 360
 GATGACAGCA GCGATGGCTC TTTGGAAGAT GACGATTATC ACGCTACAAC GGAACAATC 420
 ATTACCATGC CTACAGAGTC TGATTTTCTA ATGCAAGTGG ATGGAAAACC CAAATGTTGC 480
 TTCTTTAAAT TTAGCTCTAA AATAACAATC AATAAAGTAG TAAAGGCCCA ACTATGGATA 540
 TATTTGAGAC CCGCCGAGCT CGAG 564

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	AAAGAGGCCT	ANTCTGTTGA	GATTTCCTCC	TTTAGTTTCC	AACCTTCTCC	60
CCACCTACTC	ATTTATCCAT	CCCTCCCACC	AATCATTTTA	TCCATCCCAC	CCACTCATTT	120
ATCCATCCAT	CCCACCCACT	CATTATCTG	TCCATCCCAT	CCACTCATTT	ATCCATCTAT	180
CCCACCCACT	CATTTATCTG	TCCAACCCAT	CCACTCACCC	ACCTACTCAT	TTATCCATCC	240
CATTGCTTA	CCCATCCATC	TATCCACCT	AACAATACAT	CCAACCATTC	CCTCACCTAT	300
GCATCTGTCT	GTTGAGCTGT	TCATCCATTC	ATTGATCTTT	CCATCCATTC	ATCCACTCAT	360
TCACACACCT	ACCTACCTAC	CCACCCGCTC	ATTTATTAC	CCACCTACCC	TCTCATCCAT	420
CCAG						424

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGCCA	AAGAGGNCTA	GTCTACATCA	GCTAACTTTC	CTACAAGATT	ATCAAATTTT	60
ACACAGTATT	TTTCTGTATT	TAATGACTGC	CATGGTCTGC	AAAATTATGT	GATTAGACAA	120
TGAATGACGC	TTAAAGAATG	ATGACCTATT	TTCTAAAGTA	CACTCAAAAT	ATTAAACTTT	180
AGAGACAAAG	CAAAATCTAT	CATAAAGTTG	GCTTCTGTTG	ATAGAAACAG	AGAGGTTAGGT	240
TAATAATCAC	TGTCCTAAGA	TAAGCNAGAA	TGCTTAGAAA	TAAAAGTTGA	GACCTGCTT	300
CAAAAAGAG	AAGTTGAACC	TTCCAGCCCT	GAGTTTCTAA	TATTACATGA	AAATTATGAA	360
AATGAGCATT	AAGCCAGTCG	CAG				383

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC	AAAGAGGCCT	ACTACGTAGT	TGGAGCTNNT	TCTTCCCCCA	GCAAAGCCAG	60
AGAGCTTTGT	CCCCGGCCTC	CTGGACACAT	AGGCCATTAT	CCTGTATTCC	TTTGGCTTGG	120
CATCTTTTAG	CTCAGGAAGG	TAGAAGAGAT	CTGTGCCCAT	GGGTCTCCTT	GCTTCAATCC	180
CTTCTTGTTT	CAGTGACATA	TGTATTGTTT	ATCTGGGTTA	GGGATGGGGG	ACAGATAATA	240
GAACGAGCAA	AGTAACCTAT	ACAGGCCAGC	ATGGAACAGC	ATCTCCCCTG	GGCTTGCTCC	300
TGGCTTGTTA	CGCTATAAGA	CAGAGCAGGC	CACATGTGGC	CATCTGCTCC	CCATTCTTGA	360
AAGCTGCTGG	GGCCTCCTTG	CAGGCTTCTG	GATCTCTGGT	CAGAGTGAAC	TCTTGCTTCC	420
TGTATTCAGG	CAGCTCAGAG	CAGAAAGTAA	GGGGCTTACT	CGAG		464

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC	AAAGAGGCCT	ACTGGGAGTT	CGGAGTGATT	GTTTCCTGTT	ACAGGCCAAA	60
AAATTGTTT	GGTTACTTAG	TGGTAGCATT	TTGAGAGGAA	AGTTTACAGA	AAACTAGGGT	120
TATTTTGTGA	TTATGCTTGA	ATTGTCTTTA	TTGTTTCCAA	GGCATCTTTT	TTTTTTCCTT	180
CTAGTTATCA	AGATGTTAGG	TTCTGTGCCC	TTGTGGGCCT	TCCCTCTGCC	CAAAAAAAGC	240
ATGGATGAGC	AGAGTAATAT	CATTAAAATG	GCAGTCTTTG	TTAGTTTTC	TAGAAAAGAT	300
GGTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCC	AAAGAGGCCT	AAGGCAGGTT	TTTTTTTCTA	TGCTTATTGA	TTTAGCCTAT	60
CTATTATATA	CAGTATAATT	CAGAATATAA	ATATGGAACA	AGTTTCATAA	GGAAGTTTAT	120
CTTTAACTCA	GACATTATAT	CATTAATACT	TCAAATCTCA	TTATACCATT	ATGACCTGAA	180
TGCTACATTT	TTCTTCCTGT	ATGGAGAGCT	TAGGGAAGAA	TTGTGGCCTG	ATGTCTTCAT	240
CCATTCACTT	ATCATAGAGT	ACATAATGAT	CTCAAATATC	CAAAAATGGT	TATATTCAGC	300
TGCATATTTC	TAAGAAAACA	GGCAGGACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC	AAAGAGGCCT	AATTGATTTC	CCATGAGTCT	TGTAATCTTT	GCTCTGCTGA	60
TTGCGTTTGC	CGTCTCTAGA	CCATCTCGCT	TCGAACAAAT	CGCAAAAGAG	GTGAATTCCA	120
GAAGAACGAC	CTGGATTGCA	GAAGAATCGG	CTCCGTTCCG	TGACTATGCT	CGTTTGATCG	180
GTACCCCTTC	AAATACGGTC	CCTCTTCCGA	GTAAGACTGT	CGATGTCGTG	AAGAACCTTC	240
CTGAGAGTTT	TAACGCATTG	GAAAAGTGGC	CGGAATGCAA	GTCCATCACG	GAAATCCCGTG	300
ATCAAGGAGA	ATGTGCTTCA	TGTTGGGCAC	TGGGGAGTGG	CGGAGGTGGC	CACGGATCGT	360
CTTTGCATTT	CTTCCAACGG	AAAGGATCAA	TCCCCTCTCT	CTGCCGAGGA	TCTGTGGGA	420
TGCTGTGACT	CTTGTGGAAT	GAAATGCAAG	GGAGGGTACA	CGGGGAATGG	CCTGGGAGTA	480
TGTACGTCAG	GTGGGAATTG	TGACGGGTGG	AGCGAATGGA	AACAAGGAAT	GGTGTAATGA	540
GTACGCGTTC	CCGAAGTGCA	GTCACGGTAT	TCAGGGCTCC	TATCCTGAAT	GCTCTTCCAT	600
CCCCCTGAA	GATCCGGAGT	GTTCAACGAC	TTGCATAAAG	GGGTATCCCA	TCCCATATGA	660
TCAGGACCGT	CACAAAATGA	AGTCAGCCTT	CCAGCTGGCA	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTCGGCC	AAAGAGGCCT	ATAAAAGTCT	TATTTTITAC	TTTGTCCACT	GGAATACATC	60
ATCGTTGGCC	TATCATTCCA	AACTCCCTAC	AGTGTGGCTT	CAGCTTATCT	CTCTCTGTTT	120
TTTACAGGAA	TCCTAAACTC	TAACCCAGGG	ACCCTCAACA	TCTGTGCTGG	GTGGACTGTG	180
GCCACATTTT	CAGCTGGCCA	GTGTAAGGGT	TTTAGAGGCC	CTTACATGAG	AAGAAATACA	240
ATTTTAAAGT	CTCTGAGATG	ATGTGCTTCT	TACATTTTIG	GAATTAAAT	GCCTCTTTAC	300
TTATAAAATG	CTGGTAGTAA	TAGATGGTCA	TTATCTCACT	GTCATTTGTG	AAAGAAAAAA	360
CGATTGTAAT	AGAATTCTTG	CTATTTTIT	TCTCTAAGGG	AGGTAAAGTTT	TCTCCCTAAG	420
CAAACCTTAT	GGAATGCACA	ATGCTTGGCT	TTCACCTTCT	TTTATTCTCA	CTACCACCGG	480

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 589 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTCGGCC	AAAGAGGCCT	AGAATTAAGG	TGTATTATGA	GCAGTTGAAG	ATATATAGGA	60
AATTTTTTCC	CAAACCACTA	TCTCTGCTCG	TTCTATTCAT	TCAGTCTGTT	TATGTTATTC	120
CTTCATTCAT	TCATTTTATA	GAACAGTGGA	GTGCCTACTG	TATGCATCTA	TTGTTCTGGG	180
TCCTGGGGAA	AGAAAACAAA	GTTCTGCTT	TCATGGAAC	TACATTATAT	TGGCGGAGAC	240
AGTAACAGAC	AAACAAATGT	AGCCTGTGTA	CATGTGTTAC	ATGAAAAGCA	GGGTAGGGGG	300
CTGGGAGAGA	GTAGTAGGGA	GTGCTATTTT	CGAGGTGGTT	GTCAGGAAAG	GCCTCACTGA	360
GGAGGTGGCA	TTTGTAGTAG	ACCTGAGCGC	AGCGGGGGCG	TAAGCCCAGG	CAGCATGTGG	420
AGGAAGAGTG	TTCTTGTTGA	AAGGAACAAG	GATAGAGGCC	CGAAGCTAGA	GAGCTCAGCA	480
TGATCAAGGA	ACAGCAAGCC	CCGTGTGGCT	GGAATGGAGT	GAGCAAAGGA	ATGAGCAGTA	540
GAAGGTGAGT	GAGTTGGGAG	GTCACCAGAG	ACCATGGCAA	AGACTCGAG		589

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

GAATTCGGCC	AAAGAGGCCT	AGGGACTAAC	TGCAACGGAG	AGACTCAAGA	TGATTCCTTT	60
TTTACCCATG	TTTCTCTAC	TATTGCTGCT	TATTGTTAAC	CCTATAAACG	CCAACAATCA	120
TTATGACAAG	ATCTTGGCTC	ATAGTCGTAT	CAGGGGTGCG	GACCAAGGCC	CAAATGCTCTG	180
TGCCCTTCAA	CAGATTTTGG	GCACCAAAAA	GAAATACTTC	AGCACTTGTA	AGAAGTGGTA	240
TAAAAAGTCC	ATCTGTGGAC	AGAAAACGAC	TGTGTTATAT	GAATGTTGCC	CTGGTTATAT	300
GAGAATGGAA	GGAATGAAAG	GCTGCCAGC	AGTTTGGCCC	ATTGACCATG	TTTATGGCAC	360
TCTGGGCATC	GTGGGAGCCA	CCACAACGCA	GCGCTATTCT	GACGCCTCAA	AACTGAGGGA	420

GGAGATCGAG

430

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTTTAC TTGTCTATAG TCTAGTATTG TTATACCATG TGGTCTTGT ATAATCATGG 60
 TTTCCATTCT GTGAGTCTTC AGATTATAGG CCTCTTTGGC G 101

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC AAAGAGGCCT AAATGGCGTC GTGGCATTGA GGGGCATCCC TCCTAGAACC 60
 TCCAGGAAAA GCTCGCGGAA GACGAGGTTT TCGGAGAGA GAGGCTCCAA GCAGTCTGGG 120
 AAGTGTAGTC CAGTTGGCTT AGCAGTAGTT TCGTTGGGGG GGAGCCGAGG TTCCGGGAAG 180
 GGGCTAGGCC GGCTTGAAAA GAGATTATGA CTGTACCTTT TAACTTTGTA GCTGGAACAC 240
 AAGAAAGTGT TGTTTAATGA ATGACGTACA CATTTAAGAT CTGTTGGAC GCGGAGGATA 300
 ATCCTGTGAA TTGCTAATAG TTCCTGGGT TTGGCCCTTA GTGTGACTT CAGTATGCTG 360
 AGACGGAAAC CAACACGCCT AGAGCTAAAG CTTGATGACA TTGAAGAGTT TGAGAACATT 420
 CGAAAGGACC TGGAGACCCG TAAGAAACAG AAGGAAGATG TGAAGTTGT AGGAGGCAG 479

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

TGGAAGAGCT AACTCGTCTG GCCTTTGAGC TCTTTGCTGA AGAGCAAGCA GAGGGTCCCA 60
 ACCGCCTGCT GTACAAAGAC GGCTTCAGCA CCATCCTGCA CCGTCTGCTG GGTTCACCCC 120
 ACCCTGCTGC CACAGCTTTG CATGCTGAGC TGTGCCAGGC AGGATCCAGC CAAGGCCTCT 180
 CCCTCTGTCA GTTCCAGAAC TTCTCCCTCC ATGACCCACT CTATGGGAAA CTCTTCAGCA 240
 CCTACCTGCG CCCCCACAC GCATCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```

GAATTCGGCC TTCATGGCCT ACACAGCCAG TATCAGAACC TCAAGAAAAC GAGGACACTG      60
GGGACAGGGA CCAAAATTCA GACCACTTTT TTCTCTTGCC TTTCAATAGG ATATTCTGTT      120
AATTGAATTC ATCTGAAAAT CAAGGTCATT GCAGAGAAAGT CAGCATTCTA GAGCACAGAA      180
CAGGGCAAAA CAGGACGAAA GATGGATTTC GAGACCAAT GGAGAAGGAA GAACAGAGAT      240
ACGTGTGCTC CAAATATGAC ACCCAACTTC TTTACTCAGA GCAGTTACAT GTCAGATTAT      300
ATTTTAGTTT TTCATTTCTC CTATAGGCAT ACATACTACA AGTCTATAAT AGAAAAC TAG      360
TGGCTGGGCG CGGTGGCTCA CGCCTTTAAT CCCAGCACTT TATGGCGCTC GAG      413

```

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```

GAATTCGGCC TTCATGGCCT AGGCTCTGTC TACCAAAAAA AAAAAAAAAA GAAAGAAATC      60
TTGCAGTCTG AATACATGGT TGTGTTCTTA AGAAACCTGG TGATAACAAC GACAAAAC TC      120
CTCGAG                                     126

```

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```

GCTTCATGGC CTAGTTGAAT AGTCAGTTAG AAATGGAAAG AATGAAAGTT GAACAAGAAA      60
GACAAAGCCT TAGAACAAAA GACACAGCCC TAGAACAGAA GGACAAGGCC CTGGAACCAA      120
AAGACAAAGA CTTAGAAGAA AAAGACAAGG CCCTGGAACA GAAGGATAAG ATTCCAGAAG      180
AGAAAGACAA AGCTTTAGAA CAAAAGGGCA GAGACTTAGA GCAAAAAGAC ACAGCCCTAG      240
AACAGAAGGA CAAGGCCCTA GAACTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GCGATTGAAT TCTAGACCCA CCTTCAGACC ATCTCGGAAG ATCTAAAAAG CCTGACCATG      60
GACCCTCACA AACTGCCCTC CTCAAGTGAA CAGGTGATTC TGGACTTGAA AGGTTCTGAT      120
TACAGCTGGT CGTATCAGAC GCCACCCTCT TCCCCAGCA CCACCATGTC CAGAAAGTCC      180
AGTGTCTGCA GCAGCCTGAA CAGTGTCAAC AGCAGTGACT CCCGGTCCAG CGGCTCCAC      240
TCGCATTCCC CCAGATTCT CGAG                                         264

```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AGAACATTCC AAATTTCTT GGTTCATAA CCCTTTTTTT      60
TCTTTTGAGG GGAAAAGAGG GGAGAAAAC AGGAGTGATG TCATTTCTTT TTCATGTATT      120
CCAATTAAAG AAACAAGGGC AGGTCGTATA ATGGCATATT AATACATTAG ACTTAATCTA      180
GAACCCCTGT AGCTTTTGA TGTGTTTAT TTCTTATCTC TTTGAATTCC TGTTTGGTTA      240
CTTGGCTTCC AATGGAGGTG AACTTAACAA CCATACTTGA ATATTCCGTC TTGACTTTGT      300
AAACTGTGGC TACTTGAAAT GAAGTTATC TGGGGTCTCG AG                                         342

```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGCCT TCATGGCCTA GGTATTCTA TTATTTGTAG CTGAAATAAT TCCTGGCACA      60
AATGACTTTG AAATTTATCT CTGAACATCC CAAATTCATT ATTAGCAAAT ATCAGAAACT      120
TCACATCACT CCAGTCTGTT ATTTCACATG GTTTTCTTAG GGCCTGGAAA GTTTTACAG      180
CTGGCTTTTA TTGACTGTGG TGGCTGATAT GCTGAAGAAT GGAGCTCATT GGTTTGAGGC      240
TTCTGCCAG                                         249

```

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCGGCC TTCATGGCCT AGACATGAAT TCTTTGACTT GTGCTCATTG TTTCTGAACT	60
TATTGAGCCT TATATATATC AAATAAGGTT AATTTACACA ATAATTATTT TTAATAATTA	120
ATAAACTCAT TCATGTAGTA TATTTTAAAA CATTATTTC TCTCATTTTT CCTTCTCTTT	180
TTTCTTCCTA TATATTTTAA AGGTTTCAAG AGAAAACGGG CTTCAGTTTT TAAAAAATG	240
TAGACTTGCA TTTTACTGT GCTTATTAA AATAATGGAT ATAATTATA TTAAGGTCCA	300
AATTATTTTA TTCACAGGAT AATCATGGTC TCTGATAAAA GATGCCACCA TTTCTGTGTA	360
CTCACAGTTG TTGTATATTT TCAATTTC AATTTGAAAAG TAAACTCAAC ACTCGAG	417

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GAATTCGGCC TTCATGGCCT AGCTAGCTAT TGTAATACA AATAATAAG TCTGCATTTT	60
CTGTCTTCTT TAAGCCTTCA TTGCCTATTA AATCATTACA TTTAGATTA GATATTATAT	120
TTTGATCATT TGAGGAACCA AATTAATAAT ATGGAATAAG TATGGCATTG AATTATACAT	180
GCCTATTGCT AATATATTCA TATTTTATAG GATTTAATGA AACAGTCTCC CAGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC TTCCCTAGGA AAGTTCTTCA CATCAGGAAA CATTAGATCA TATACAGAAA	60
CAAACTAAAT TTGATAAAGT AGTTATGGAG TTTTTCATG AGTGATGGT GAATAAATTC	120
AAGAAAACAT CTATTCGTAA GCAACAGACA AATAATCAAA CAGAAGTAGT TAAAATAATT	180
GAAAAGATG TTATGGAAGG TGTACTGTA GATGATCACA TGATGAAGGT AGAGACAGTT	240
CATTGCAGCG CTTCAGTGT GTATATCCCT GCTTTACATA GTTCAGTTCA GCAGCACTTA	300
AAATCTCCTG ATCATATCAA AGGGAAGCAG GCTTATAAGG AACAAATAAA AAGAGAGAGT	360
GTCTTGACTG CTACAAGCAT TTTAAATAAT CCAATAGTGA AGGCGCGATA TGAACGTTTT	420
GTTAAGGGTG AGAATCCTTT TGAAATTCAA GACCATTCTC AGGATCAGCA AATAAAAGGC	480
AGACTCGAG	489

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTCGGCC TTCATGGCCT ACTTCACTAA CCTTTTTTGT TTTAAATGA ACCTGCTACT 60
 TAAAAAAAT ACACATCACA CCCATTTAAA AGTGATCTTG AGAACCTTTT CAAACCAGAT 120
 GGAGCATTGC TTGCAAATTT TTTTCTCTA TGTTCATG CGCTCGTGTG TGTGTGTCCA 180
 GGCAAGAACA CATTTTATAA AAATAAGAAC ACTTGGGCTG GGCATGGTGG CTCATGCCTG 240
 TGATCGCAGC TCTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GAATTCGGCC TTCATGGCCT ACACAGCTGC AGTCAACATC CACAACTACC GGGACCACAG 60
 CCCCTACTGC TGGCTGGTGT GCGTCCAAG CCTGGCGGCC TTCTACATCC CTGTGGCTTT 120
 GATTCTGCTC ATCACCCTGGA TCTATTTCTT GTCCCGGGC TACGCTTACG GGGTCCTCTG 180
 GCACAGAACC CCAAGGCGGG CAACAGCAGG GCTCGAG 217

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAAAATAAA TAAATAACCC ACAGAGCTGA 60
 GCACAGGCTT CTTATGCTT TTCCTTTGGA AGGTGTCCTA GATATATGAT GATTTCTTTT 120
 TTCTTTCACC TCCTCTTGAT TGTCAAGT AGCTTGCTTG GCTCAGGAAC AACAGAAGAG 180
 AATAAAGAAA ATGACCTCAG ACCTTCCTTA CCTCAGTCTT ATGCAGCGAC CGCAGCCAGA 240
 CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

GAATTCGGCC TTCATGGCCT ACTGTCTCAA AAAACAAACA AACAAAAAGA AAGAAAGAAA 60
 AAGGAAAGGT AGACTTATAT AAAATAGACA GTAAAGCATA GGGCAGCAGA AAGGAAAACC 120
 TACTCGCAA AAGTCACTTG TTTAACCTC ATCCAGGAGC TTCTCTAAG TTCACCTTTA 180
 TTTTTCACAC GTCCTGGGTC CAAATCCAC CATGCTCTGC CGTATTCTTG CCCTTTGCTC 240
 TGTTGTTGAA AGAGTCATGA GCGAGGCCTC TCTATGGATG GTTCCAATGA GCCACATGAA 300
 CAAAGCCATC GTCAGTAAGC AGCCACTTCT CGAG 334

(2) INFORMATION FOR SEQ ID NO:857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GAATTCCACT TGATCAACTT AATTCCTTTT CTTTATCTTC CCTCCCTCAC TTCCCTTTTC      60
TCCCACCCTC TTTTCCAAGC TGTTTCGCTT TGCAATATAT TACTGGTAAT GAGTTGCAGG      120
ATCCTCGAG                                     129

```

(2) INFORMATION FOR SEQ ID NO:858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAATTCAGC ACCATAATTT GGCCACTCAG CTGTCATCAG GAACTAAGCC AACATTCCTT      60
TTCAGAAAAA GACTTTGGAG AGGGGCAAAC ACTTCTGACA GTCATACTGT GTACTTATTT      120
TAGAAAAATA GCTGCTCTCA GGCTTCAGTA TCCAGTCAAA TATAATATAG AACTCTAGTC      180
TGTTTGGAGT CCTACTACAA TAATATTTTC ACAATAGACT ACCAGTTATG AAGTTCTCAC      240
ATTTTCCCG CATGCTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCCTGT CCCACCTGCT GAATGAGTGC GTGCCAGCTG AACATCAGCG TGGCTTCGTT      60
CTTCAACACA TTTACAAAAG AAGTAAAAAT AAACAGTTT TTCTTCTCAA TTCTCCTCCC      120
TGCTTTTTC CTTTGAACC ACAATCATGC CCCAGTAAGT GCTTTCCTAG GTGAGAGGTG      180
TGTGTCCCAG GTTGAAGGCA AGGCCAGTGG TCTCGAG                                     217

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```
GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAAC ATTAAAAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                      107
```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```
GAATTCTAGA CCTGCCTCGA GGGCATCCTT TACTTTTTTT TTTAATTCAG CACAAACCAA      60
ACAAAATTTT AAAATTGAT GAGATTGAA GTTGGACAAA AGTGTTATGC AGTTTAAAAA      120
ATTTTTTTTT TTTTTTTTGA GACCAGATCT CACTCTGTTG CCCAGGCTAG AGTGCAGTGG      180
CATGATCTCA GCCCAAACCT CTACCTCTTA GGCTCAAGCG ATCCTCCCAT TTCAGCCTCC      240
CAGGTAGCTG GGAGGCTGAA ATGGGAGGAT CAACTCGAG                      279
```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```
TGTATTTTTA CGTGACCTGT TTTCCAGAAT TTATGATATT TCTATGGTTG GTATTCTCAA      60
TTTTGCAAAT GTGTCTTGGT GTGGAACCTT TTCATTTGTT TTGCTGGGGA ATTGATGGAT      120
CCTTTGCATC AAGATGCTTA TATTATTCTC TCAGTTCTGG GAAACTTCCC TGTATTATTT      180
GTTTGATAAT TGCTTCTCT CTGCTTCTC TTTCCGTTT TTTGGAATTG CTGTTTGTG      240
TGTTGCATTA CTGCAGAGAA CTCGAG                      266
```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```
GAATTCGGCC TTCATGGCCT AGTGCTGTGG TAGTTTGTGC CTTTAGAGGG ATTTGTGTAT      60
CTCATATAAT TTAATTTTTT GACATCACT TTTTCACAAT ATTCTGTTAG AATTCCTTTA      120
ATTTCTGTAA GGTGATATCT ATACTTTCAT TTATGTCTAG TAACTTGAAT CTTCTCTCTT      180
```

TTGTTCTTTC	TCGGTCAAAC	TAATAATACG	TCAATTTTAC	TGATATATCA	GAAGAACCAA	240
CTTTCAAGTT	TATTAATTTT	CTCTATTGTT	TTTATTTTCA	CTACTTATCT	CCATGCTAAT	300
CTTTATTATT	TCTTCCTTCT	GTTTACTTTG	GSTTAAGTCT	GCTCTTTCAC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC	TTCATGGCCT	AGCTTACTTT	ACAATTCTGC	TGTTTGTCAA	GTGTTCTTAT	60
AGTTTTTTTT	AAAGGTATGT	TAACATTTTT	TCCCTTTTGG	TTTATATTTG	TAGGAATCTT	120
TGCCTTTAAG	TGTGCCCCGTG	CAGAAGAATT	ATTTAACATG	TTGCAAGAGA	TTATGCAAAA	180
TAATAGTATA	AATGTGGAGC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC	TTCATGGCCT	AGTCACTTGT	TCTGTAGAAT	ATGTTCAAAT	CTGATTTTGT	60
CTTTTGTGTT	TCTTGTTGTA	TTACCTTGTT	CCTCTATCCC	CTGTTTTTTC	TGAAAATGAA	120
AGTTAGCTTA	GAAGTTTCAT	TCCATTCTGG	TTCAAAATGC	TTAAGTGCTT	TATGTCGTGT	180
CATATTAGGA	AACACAGTAT	CTAGTGGTCC	CAATTTTAGT	GATTCAAAAA	TCAGTCTCTA	240
GGTTCAGAGA	TTAATCAGTA	GATTCAGAGA	TCTCTCCATT	GTAATTTTCT	TAATTAACCT	300
TTGAATTGCT	AATGTTCTGT	TCAGTGATCG	TTGTGGCCCA	AATTATTAT	TTCACTAGGG	360
GACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC	TTCATGGCCT	AAGGAGCAGC	AGGAACATGG	TACATAAAAT	CATCCTGCTT	60
CTTATAATGG	CAGGAATCAG	TGGGATATGG	TATTTGTGCA	GCATGCTGGG	GCATCCACTA	120
GAAAGGCCTG	AAGGAAGACT	CGAG				144

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC TTCATGCGAT TGAATTCTAG ACCTGCCTTG AGCCCCCTCCA CCCCCAAATC      60
CTTCCTCTCC TCCCAGTCCC ACCCCTTGCC CCACGGAGTC CTGGGGACGC AGTGCCCCAG      120
CTGGGAAGAG GCGGGGATCG GGCACCTGTT CCTCCTTGTC CCCGCTTCT TGGGGGCTTG      180
CTACTTTTGT TCTTCTATTG TGTGGCTTTC TGAGTATTG AACCCAGTC CTGTGTCACC      240
TTCCTTTTTC CTTGCTGTC CCCTCGAG      268

```

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT ACAGAACTAT AATTTATCTT AGTTTAAGCC ACTGGTAAGT      60
GTAATTGTAA TTGTAATTG TTACATCTGC TATAGTGAAA CTAATACTGA AATTTAGAAA      120
AGATGGGTAA CTATTATGT GGTGAAGTTT AAAAAAGATA AGTAACCTGT TGAAGATCAC      180
ATAATTAGAA AAGAAAGCAG TAGAGCTTGG CCTTGAAGTC AACCAGTGTG ACTCCAGAGC      240
TTGTAGAACA GAATAACCAC CTCCAAGGCC AGCTGAATCT GACCACAGTC TGGTGAAT      300
CTAGTACATC TCGTTGAGAA GTGGGATTGC CGGAGGGGAG TTGGTTATTG ATGAAGGTGA      360
TGATGTTTGT CCAATGTCCT CGAG      384

```

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

```

GAATTCGGCC TCATGGCCTA CTTGGAGAGT TTTGTAAGGA GAGTGGCAAA CATAGCACGG      60
ACTAATGCCA CGAACAACAT GAATCTAAGC CGAAGCAGCA GTGATAACAA CACTAATACT      120
TTGGGGAGGA ATGTGATGAG CACAGCAACT TCTCCTCTTA TGGGTGCTCA GAGTTTCCCT      180
AATTTGACCA CACCTGGTAC TACATCAACA GTGACTATGT CAACATCCAG TGTTACTAGC      240
AGCAGCAATG TAGCTACAGC AACAACTC GAG      273

```

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC TTCATGGCCT AGGTCAGGAG CCTTCTTGGA GTCCCAATTC TGCATCCCCA	60
AATGATAAAG ATGGGGTGAA GGAAGTGAAG GCCATGAGTT GGAGAGTCCT CTTGCTTGAG	120
GTCCCTGAGA ATGTGGTCCC GGAGTATCCG GATCACTGGA AGCCAGGACT TCAACGCATT	180
GGGTAGTGAG GGATGGAGGG AGGGGCTGGA CGCAGAAGCA GGATGAAGTC TGCTGGGTGT	240
GAGCCTCCAA GGAGGTAGAA CAAAGAGGGC AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC TTCATGGCCT ACCAGACTCC CATAATAATA AACCCCTGGTA ATAAACAAAG	60
GAACTCCTTC CAGTTTCAGT GTATCAACCA CCACGTACCA GATAAAATCT TATTTACCTT	120
TTCACAATTT ACCAGTGTG GGCTGTGAAT TAATATTTT ATTTTCTGT GCATTCATAA	180
ATTAAGATTA TTTTATTGTA TTGTAAGTGT AATTTTGAGA CTAAAGTCTA AAAACAAGAC	240
ATCATGAAAT GGAGCTGGAG GATACTCGAG	270

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 339 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GGTTTAGAAA GGGCACAAAC AGTGCAAACC TGTTTCATGAA CCTTTACATG TCATGAACAG	60
GGCAGAATGC TTCAGGAAAG AATTGTGCGA AGTAAAAAAG CAAATAATGG ATGCAGCTTA	120
TTCTAGTTAT TGAAGAATCC AACGGGATGG AAGCTAAATG TAGCACATGG CATGGGCGAT	180
GTCTCAACAG TGAGTGGGAT AACAAATCGT TTTAATGGTT CAGGGCCAAT AACCGGGGAG	240
GGTGAGGAAC GGCATCTCTG TTTTGAGTAA ACAAGAGTGA TTTCTTCCC TGACACTGAA	300
AAATGAAACC TTTGGGGAGA TAGAGGAAGC GATCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 245 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AACCTTTAAA	CCCTAAAATC	CAGGAAAAGA	AAATAAATAC	60
ATTATCATGG	ACCTGAGGGA	TTTTTACCTG	TTGGCTGCTC	TGATTGCCTG	TTTAAGGCTG	120
GATTCCGCAA	TAGCTCAAGA	ACTTATTTAC	ACTATTAGAG	AGGAATTGCC	TGAAAATGTG	180
CCCATAGGAA	ACATACCAAA	GGATCTGAAC	ATTTCTCACA	TCAATGCTGC	CACAGGGCCA	240
CCTCG						245

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	AGTTTTCTTC	ACTGGCATTG	ACAAATTTAA	GCCATTGCTG	60
CCTCATTAGC	CTTGTATTTT	GTGTGCATAT	CATATATCCA	GACCTGTATG	TTCACCTTAA	120
GCATTCTTAT	ATCACACTGT	CTCCTCATCT	ACCATATGGT	AAATGTTAAA	ACTCCACATT	180
TGTCTGCATC	AGGGAAAATG	CATGGGCACA	CATCTCCCC	CCCTCCCTC	GAG	233

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GGACAGGAAG	TCAACTTCAA	GCAGATTGAC	TGAAACGGG	ATCTCATTTA	GGAAGCATAA	60
GTGTCCAATC	AAAAACTGTG	TATTTTTTTA	AATTTGGAAA	ATACTCAAGT	TCCAGTTGCT	120
TATCATTCTC	CTTCACITTC	TGAAAACCTG	GCAATCCCAT	GTGGACTTCT	GGTAGAATGA	180
GCAATGCAAA	GAAGTGGCTT	GGACTTGGCA	TGTCCTTGTA	CTTCTGGGGG	CTGATGGACC	240
TTACGACCAC	CGTTCTCTCG	GACACCCAC	ACCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC	TTCATGGCCT	AGTCTCTCAA	TTAGTTATTG	CATTATTTTC	AAGTATTGTA	60
TTATCATTTA	TTGATATTGG	TAGTGTTTCC	TAAAACAGGA	AATACATAAT	TTGGCATCCT	120
TATTCTTAGT	TTTATACCTA	AAGAACCTAG	TAATCAGAG	GAGAACGTAG	TAACATTATC	180

ACTTGTTAAT CAAGCTTTCA GTGAAACAGT TTATCAAACC ATTTTTTTTA TTTTGATTCA 240
GCAAATTTGT CAACTAAATT TAATTTAAAA GTAGAGGTCC AAAGCTCGAG 290

(2) INFORMATION FOR SEQ ID NO:877:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC TTCATGGCCT ACTCAAATTG GAAAGAAAGA TTCCTTGAGA CTTACTTTTA 60
AAATCTAAAG TGTGAGGNN A CANCAGAGT AAAGNCCAGA CTCATTNNAC CTTGATGTC 120
TGCATAGATC CAGNAGTTGT ACATTTTACC TAACAACATC ACTTTTGTTG AACATTCCAA 180
CTCCAGAATG ATCCCCAATC ACCCTAATCT CAGAATGCTG GAATGATGTC TGTTGGCAAA 240
CCCAGGACTC CAACTCGAG 260

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAAGCGACCA TTCGTCCAAC AGGTATGGCT GGTTTTTG TG CAATGAGAGA ATGTCCACTC 60
GCAATGATGA GCCTGAGAAG GCAAGTCGTC CGTTTGATGT GGATCGCGAT GGTTTTTGTTA 120
TGGGTGAAGG TGCCGGGATT CTTATTCTGG AATCACTCGA ACATGCTGAG AAACGTGGAG 180

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC AAAGAGGACT ACACAGAGCC CCTGTTTGGG AATTGAGAT TCTGTGTCAT 60
GCTGGTTTTT CTTTCAGAA T GCTTGAAT CGAGTTCTCT TAGCCACTGG ACACCTAGTT 120
TTCAGGAGAA TGTCCAAGA TTGTTTATAT ATACAAAATG GCAAAAGTAC TGTTTTTCGA 180
ATTGATAATT CAAGCAAAGG CTTCTCTTTA CTGTCACTGA TTTTTTTTG TTTTATTTT 240
GTTTCCTTGT TTCTATTTCC TTGAAGCTTT GAAGGGAGGA GAAGCAGAAA ATTTTGTTTA 300
TGTTTGTTAA AAATCAGAAC TACTTAATGC TTTTGCCAC AGCATATTTC CTGCCTGTT 360
GGAGCCGTTA GGAAGATTAC CTATGTCCTA ATCTTCAACC TGAGAAGATT TTTGACTCTT 420
GTGTCTACTG TTGATTGTTT GCTTGAGTTC TCAAAGACCT GTGGCCAGGT ATTTTAAAAA 480
GTCGTCTATT TCTCGAG 497

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCT AGCAAAATCA AATTCAACCC ATGAGTCACA GTGCTTTCTT      60
CAACAAGAAA ACATTGAACA CAGAAAGCAA TTGTGAATAT AAGGACCCTG GGAAAATGAT      120
TCGCACGAGG CCCACCTTG CTTCTTCACA GAAACAACCT CAGAAATGTT GCTTATTTAC      180
AGAAAGTTTG AAGCTGAACC TAGAAGTGAA CGGTCAGAAT GAAAGCAATG ACACAGAACA      240
GCTTGATGAC GTTGTGGGT CTGGTCAGCT ATTCAGCCAT AGCTCTTCTG ATGCCTGCAG      300
CAAGAATATT CATACAGGAG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GGCCACCTG TGTCTGGTT GAGGGTCTCC AGGGTTCTTT GGGGCCGAG GCCAATGGTG      60
GCAGAGTCTA CATAGAACTA TGCTTCGTGG TGTTCTGGGG AAAACCTTTC GACTTGTTGG      120
CTATACTATT CAATATGGCT GTATAGCTCA TTGTGCTTTT GAATACGTTG GTGGTGTGT      180
CATGTGTTCT GGACCATCAA TGGAGCCTAC AATTCAAAAT TCAGATATTG TCTTTGCAGA      240
AAATCTTAGT CGACATTTT ATGGTATCCA AAGAGGTGAC ATTGTGATTG CAAAAAGCCC      300
AAGTGATCCA AAATCAAATA TTTGTAAAAG AGTAATTGGT TTGGAAGGAG ACAAATCCT      360
CACCCTAGT CCATCAGATT TCTTTAAAAG CCATAGTTAT GTGCCAATGG GTCATGTTG      420
GTTAGAAGGT GACAATCTAC AGAATTCTAC AGATTCCAGG TGCTAGGCCT CTTTGGCCGA      480
A

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

GAATTCGGCC AAAGAGGCCT AGGGAAGAGT GGAACAAAAG TCAGTCGTAC ATTCAGCTAC      60
ATCAAGAATA AAATGTCTAG CAGCAAGAAG AGCAAAGAAA AGGAAAAAGA AAAAGATAAG      120
ATTAAGGAGA AGGAGAAAGA TTCTAAAGAC AAGGAGAAAG ATAAGAAGAC TGTCAACGGG      180
CACACTTTCA GTTCCATTCC TGTGTGGGT CCCATCAGCT GTAGCCAGTG TATGAAGCCC      240
TTCACCAACA AAGATGCCTA TACTTGTGCA AATTGCAGTG CTTTGTGTTT CAAAGGCTGC      300
CGAGAAAGTC TAGCCTCCTG TGCAAAGGTC AAAATGAAGC AGCCCAAAGG GAGCCTTCAG      360

```

GCACATGACA CATCATCACT GCCCAGC

387

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC AAAGAGGCCT AACGCAGCCA TGGCTCGTGG TCCCAAGAAG CATCTGAAGC      60
GGGTGGCAGC TCCAAAGCAT TGGATGCTGG ATAAATTGAC CGGTGTGTTT GTCCTCGTC      120
CATCCACCGG TCCCCACAAG TTGAGAGAGT GTCTCCCCCT CATCATTTTC CTGAGGAACA      180
GACTTAAGTA TGCCCTGACA GGAGATGAAG TAAAGAAGAT TTGCATGCAG CGGTTCAATTA      240
AAATCGATGG CAAGGTCCGA ACTGATATAA CCTACCCCTGC TGGATTCATG GATGTCATCA      300
GCATTGACAA GACGGGAGAG AATTTCCGTC TGATCTATGA CACCAAGGGT CGCTTTGCTG      360
TACATCGTAT TACACCTGAG GCGGGCATAA CACAGCAAGA CGAGAAGACC CTATGGAGCT      420
TTAATTTATT AATGCAAACA GTA                                         443

```

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC AAAGAGGCCT AACATCATT TGTACTCTAA TCCAATCAAA GAAGAAATGA      60
CTGAGTCTAA GTTCTCTAAG TACTCTGAAA TGAGTGAGGA AAAACGAGCC AAACCTCGTG      120
AAATTGAGCT CAAAGTTATG AAGTTTCAGG ATGAATTGGA ATCTGGGAAA AGACCTAAAA      180
AACCAGGCCA GAGTTTTCAG GAGCAAGTAG AACACTACAG AGATAAACTT CTTCAACGAG      240
AGAAAGAGAA AGAGTTAGAA AGAGAACGAG AAAGAGACAA GAAAGATAAA GAAAAATTGG      300
AATCTCGCTC CAAAGACAAG AAGGAAAAAG ATGAGTGATC TCCGACAAGG AAG          353

```

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC AAAGAGGCCT ACAATTTTT GCCTTTTAC CCTTCTGTCC TTTAATGCCA      60
TCTCTTTCTC AATTATTTTC TCTCATTTT TTTCTGAGCA GACTTATACA AAAAGGAACA      120
TAAATTAAAT TTGCCAAATA TCAAAAGAGA GGAACTTTT ATTTTTTATT TTTTGGAAAC      180
GGAGTCTCAA TCTGTCTCCC AGGCTGGAGT GCAGTGACGC AATCTCAGCT CACTGCAACC      240
TCCGCCTCCC AGTTCAAGAG ATTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGT      300

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ACCCTCTACC ATACTCAGCT AATTTTGTGA TTTTGTAGTAG AGACTGGTTC ACCATGTGGG	360
CCAGGCTGGT CTCGAACTCC TGACTTCAGG TGTTCTGCCT GCTTTGGCCT TCCAAAGTGC	420
TGGGATTATA GCGGTGAGCC ACCACTCTCC ACTGAACTTT TTAATCTTAG AGCAG	475

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC AAAGAGGCCT AGGGGTGTTA ATTAGCTCAG CTGTAGCAAT CATTTCATAA	60
TGTATATCAA AACATCCAC TGTATACTTT ATACTTTTT ATAAAAATAA ATATTCTTAC	120
AAAAGGACAG GCGCTGTGTC TGTCTGGCTC ACCATTGTAC CCAATACCCA ACAGGGTGCC	180
AAGTACCCAA TACCCAACAG GGTGCCAAGG AACACAAAAG GCACTCAAAA TATGTTTGT	240
GATTGGAGTT TACAAGGAAG AAAGGTATTT TCTTATCCCT CTCTTCCCTT CCCACCCAAA	300
CATAGCTTCT TCTAAGAAA GAACTGAGG CTGGGCAAGG TTAAGAGCTA GCTCCTGGTA	360
CTTTTGCATC CACACTCAGT TTACCTGTGC CTAAACCAG ACTTCATCA ACTTCAGTCT	420
TCACAAGTCA CTTACCACTT TTTGCTCTAC CTAATTACTG CCTGTGTAGG CCTCTTGGC	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GAATTCGGCC AAAGAGGCCT AGTGGGACAT AAGGCTGGAA GGTAGCACAC ACAGCACCAT	60
ATTCTTTTTT ACTTGCATGC GAGTTACTTT GAGTGCTTTT CTCTTTACCA AATATATGAG	120
TTCTATTACT ACATTCCTTT TCTTTGTTT TTTTAGTGAG ACAGGGTCTC GTTCTGCCTC	180
CCAG	184

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GAATTCGCCC AAAGAGGCCT AGTTTGCAC TTACTTTTAA TTTCAAATCA GCTGCAGATG	60
TTTGGGAGCC TTCTCGAG	78

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```

GAATTCGGCC AAAGAGGCCT AATGGAAGAT ATGCTGAAAG ACTTTCCTCT TGGAGAACAC      60
TTATTATTGG TTGGCAACCA GGGTGTAGGA AAAACAAGA TTGTGACAC ATTCCTTCAC      120
CTGCTCAACA GACCCCGAGA ATATATTCAG CTACACAGGG ATACCACAGT ACAAACCTCT      180
ACGCTTCAGC CTTTCGGTTAA AGACGGACTT ATTGTATATG AAGACTCACC TTTGGTTAAA      240
GCAGTAAAGT TGGGTCATAT TCTGGTAGTA GATGAGGCTG ACAAAGCTCC AACAAATGTC      300
ACGTGTATTT TAAAACTCT AGTAGAAAAT GGAGAAATGA TTCTAGCAGA TGAAGACGC      360
ATTGTTGCAA ATTCTGCTAA TGTGAATGGA AGAGAAAATG TTGTAGTGAT TCATCCTGAT      420
TTTAGGATGA TTGTTCTGGC AAATAGACCT GGATTTCCTT TCCTAGGCAA TGATTTCTTC      480
GGTACCTTAG GTGATATTTT TAGCTGCCAT GCAGTTGATA ACCCAAACC CCACTCGGAG      540
CTCGAG                                         546

```

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```

GAATTCGGCC AAAGGGCCTA GAGATTTCAT GTATTCTCT TCACTTCCAA GAGAGTGGAT      60
AGAATGGAGA AATCTAGATT GATCTTTACA GCTCCAGATA AAGGGACTAA AAATATTGGT      120
TTAAAATATT AAAGGTTAAA GAAAGAGACT GTTGGTTTCT TTCAAAGTGA TTTAAATTTA      180
AACTAGGTTT TTATTACTAA GTTTTGGAAT TGGGGTAACC ATTTTCTCT CATATCAAGG      240
ATATGTACAT ATTTCCCAT TCCCATTAAT TAAAAACAA CAATCCCAT CCACTTCTTA      300
TAAATAGTTC TTAACCTGGG CTTAGTAACA ATGTATATTG TGCCAGTAAT ACAGAAAAGG      360
TGGGAGTATA AAGACCATCC TGTCTGTGTA GAATCCTATA GAACCAAGGT GCTGGATTAT      420
GGTGGTT                                         427

```

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```

GAATTCGGCC AAAGAGGCCT AATTTTATTG AAAGTGCTTA TGTATGTCAA AGGAGCCCAC      60
AACTTCAGCT ACACAACTTT TTGTATTGAA AGAACTCATA CTTTTTGTAG CTTTTATTTT      120
ACATTTAATT TAAAGTGACT TTTAGCACTA AAATGCCTAG AAGATTTTAC TCCAGACCTA      180
TAAGGAAATG TTTAGTTTTT ATGAAAAATG ACAAGTCGAT GGTTAAACTT CTCATGTCTT      240
TGGTGCTTTG GCCCTAATAG CACTGGACAA CACCACGACC ACATGGAAAC ATATTTTGTG      300

```

AAGCAAACT TTAATTTTAT ATAACGTATG CTATGGAGAA CTCGAG

346

(2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 95 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC AAAGAGGCCT AGTGGAGAGT GAAGCTTAAG ACTGCAATTG CAGAAAAAGT
CCATGAGGAG AGAAGAAGGA GAAAGGGGG AAGAG

60

95

(2) INFORMATION FOR SEQ ID NO:893:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 424 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

TTTTTTTTT TTTTTTTAA ATACTTCGCA TACTCTCAA TGCCCAAAA TAGCAAGGTG
GTAAAAAGAG AATTAGATGA TGATGTTACT GAGTCTGTCA AAGACCTTCT TTCCCAATGA
AGACGCAGCT GATGATGCTT TTAAGACAAG TGAAC TAATT GTTGATGGCC AGGAAGAGAA
AGATACAGAT GTTGAAGAAG GATCTGAAGT CGAAGATGAA AGACCAGCTT GGAACAGTAA
ACTACAATAC ATCCTGGCCC AAGTTGGATT TTCTGTAGGT TTAGGAAATG TGTGGCGATT
TCCATACCTA TGTCAGAAGA ATGGGGGCGG TGCATATCTT TTACCATATT TAATACTACT
TATGGTAATA GGTATTCCCC TTTTTTCTT GGAAC TCTCT GTGGGTCAA GAACCACTCT
CGAG

60

120

180

240

300

360

420

424

(2) INFORMATION FOR SEQ ID NO:894:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 390 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GCCAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA
GGATTCCCCA GCATCCTGGG ACCCCACAGG AGACCAAGCC GTCATGACAA CAGTGCAATT
GGCAGAGCCA TGGAATACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT
GTGAGTCCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTTAGC AAATGAAGGA
ACAGACGCTG GATACCTGCC TGCCAATTCC ATGCTTCTG TAGCTTCAGG GGCCTCTTTT
TCCCAGGAAG GAGGGAAGA GAATGATACA GGATCAAAGC AAGTTGGAGA AACATCAGCA
CCTGGAGACA CCTTAGATGT CACCCTCGAG

60

120

180

240

300

360

390

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GAATTCGGCC TTCATGGCCT AGTAGCTGGT ATTTATTCCC CAAAGTAATA ATGTTGAAGT      60
ATGGGTCTCA TCATCCCAT ACACAGAAAC ACAAACACT TTGATCATAA ACTTTTTTCT      120
TCAGAAGCCA AACTAACTTG CAGAATAATA GAGCCACTGG TTTAATGTTT CCTCAAGATA      180
GGTTTTAGTG TAAGCTAGTA TTCTGTGTGT TCGTAGAAAT GATTCAATAC CTGCAGCTGG      240
TGAATTAGGA ATTGTATTG TTGCCTTTT TATATTAGAT GAGGTGCAAA AATTTAATG      300
CTAGTCAGTA TGCACCACCA CAGGAAAGTT AGATCCCATT AGCACTTGAA ACTACAGCTT      360
TGGAACTTA GGCTAAGTTA ATTTGATTT GTTACTTGAT TCACCTACTG ACCTTTTCTT      420
TTGTTTGAAG TGCTTATCAG CATAATGAGC TAAGTGTCAT GCATATTTGT GAAGAAACAC      480
CCTTTTGGT CCCTTTGGG ACAGAGAGG ACTCCTTGAT CTTTATGAAT GACAGGTTAC      540
TGTTTTGCCT TATTGCTTAA CTTAATGTAG TGAAATAAAG CAGACGAGGC TCGAG      595

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GGCTGATCCG CGTGAACATG GAGGACTTGC GAGAGCAGAC TCACACCCGC CACTATGAAT      60
TGTACCGACG CTGTAAGCTT GAAGAGATGG GGTTCAGGA CACTGACCCT GACAGCAAAC      120
CCTTCAGTCT TCAGGAGACA TATGAAGCAA AAAGGAATGA ATTCCTGGGA GAACTGCAGA      180
AGAAAGAAGA AGAAATGAGA CAAATGTTG TTATGAGAGT GAAGGAGAAA GAAGCTGAAC      240
TTAAGGAGGC AGAGAAAGAG CTTACAGAGA AGTTTGACCT TCTAAAGCGG ACACACCAAG      300
AAGAAAAGAA GAAAGTGAA GACAAGGAGA AGGAGCTCGA G      341

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GAATTCGGCC TTCATGGCCT ATGCCTTAAT TTTGCTGTTT GCCCTCGGAT CTCTGGGTTT      60
GATTTTTGCG TTGACTTTAA ACAGACATAA GTATCCCTT AACCTGTACC TACTTTTTGG      120
ATTTACGCTG TTGGAAGCTC TGA CTGTGGC AGTTGTTGTT ACTTTCTATG ATGTATATAT      180
TATTCTGCAA GCTTTCATAC TGA CTACTAC AGTATTTTT GGTTCGACTG TGTATACTCT      240
ACAATCTAAG AAGGATTTCA GCAAATTTGG AGCAGGGCTG TTTGCTCTTT TGTGGATATT      300
GTGCCTGTCA GGATTCTTGA AGTTTTTTTT TTATAGTGAG ATAATGGAGT TGGTCTTAGC      360
CGCTGCAGGA GCGCCACTCG AG      382

```


(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```

GAATTCGGCC TTCATGGCCT ACGAGCCTCA CATCACTTGT ACAAGCCACC TGGGAGAAGT      60
GGCCCTCAGG AAGATCCTAA AACCAATACA CAAATACAAC TTTTTCATT CATTAATACA      120
TCAAGTTCAT ATAAGAGTCA AACAGGTAAA AGCAGCATCC CAAACTGTT TCTCCTCGTA      180
CATGTCAGTT CCACGATCCT CAGTCTCATA AAGTCAGGGA CTAGAGACCA ATGTAATTAT      240
CAATACGTAC CTGCCTTTGA GTGAACCTTC AATGCCAACT AGGAAGGGCG CTTCCTCAAAAC      300
GACGTTATTT GTAACCTCCTA GGAAGACAAA CACGGGTCAG AACCCATACT CTGCGGGCCT      360
TGAAATGGAA AATCTCTCCT CTAGACAGAC TCATCCTGGC CGTAAATATC AGGAGACTCG      420
AG

```

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 806 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      180
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      300
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      360
NNNNNNNNNN NNCNTTGCAN GNTTTGGTTC CNTTTNTTCC TTGTTTNTTT TTTTGCACAA      420
TATTTCAAGN TTTACNAGGC ATACATCAAT CCAAGTTCGG AATTTTAATT AAGAATTCGG      480
CGTTCATGGC NTAAAGAAGN TTGATGCTAC CCCCAGGAAAT GCCAGAAGAG GANATACATT      540
GAAATAGACN GTGATGAAGA GCCCAGGGGT GAATTACTTT TTNTTCGGGA CANTGAACGC      600
NTTCATAAAA AGCCAAAGTC TGACAAAGAG ACAAGAGTNG CAANTNCAAT GGNTGGANAG      660
ACAGACCGAA AAGAAATTNT GAGGAAGAAA ACCAAAACAA ATCCATNNTC CAGNTCGACA      720
AATNAAGAGA AGNAAANACA GAAGAACTTT ATGATGATGC GGTATAGCCA GAATGTCCGG      780
TCAAAAATA AGCATTCTCT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```

GAATTCGGCC TTCATGGCCT AGGAGGGCCT GTTTCAGAAT TGCTTTAATA GTTCCTTCC      60
AGTTGAATTT ACCTTTTGCA GGAGCCTCAT CGTCTTCTGG TTCTCGGCC TCAGGATGCT      120
CTGGGAGCTT CATCTTTTC TTCTTAGAAT CTGTTTCAAC TTCCGAGTGC CTCCGCTTCC      180
TCTTCCCTGC CCCACGCGTG CCTCTTCCTC ACTGGCGCTG TCCTTGCGCT GCTTCTTCTT      240
CTTGCTCCTC TTCCCTGCAG AGCCATTGGC CTCAGGGA CTCTCCCCAC CAGCCTCAAG      300
GTCAGCCTCC TGCCTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AAGAAAAGAC AAGGTCCCCA TAAGAGTGGC GAGAGGAACA      60
GAGCCAGGAC ATCGGAAAGC AAGCCCTGT GTTCCCAAAC CGCAGAAGAG GGAGCTCTGA      120
TGTTAGACAA GCCACCCTCC TACAAGCGAA GGGAAAGTAA CTTTGAGCAA AAATGAGCAA      180
CAGAAAATGA GATCAAGGTC AGATCTCATA CAAAGTTGCA AGATGAAAGA ATGAGCAGCA      240
GAATAACCTC CCTGTGATGT GGAAAGTGTG CCAGGAAAAC AGACCCAAAC GCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC TTCATGGCCT AGGGGTTCTT TCTCCTGCAC GATGCCAGGT GGTACTGGAA      60
TCTGCTGAGT GGGATTCGGT GGTGAGGATC ATAAGGGCAA ATTTCAAAGG CTCTGGCTC      120
CATGAGAAAT TCTGAAGCA GGTATCTCA CTGCTAGAGT CTAACGGAAA TGCTTCTTGT      180
GGAGAAGCCC TTTGTAAAGA AGGATGGAGT TGTCTCTGC CCAGTTTGG CCTTGGGAT      240
TCTGTAGGTG ACGGTCTTAA CTGTGTGTCT GTTCTCTAGG ACTGTGAGTG GTGGATTAGA      300
AGAGAGATGA GGAGCTGCCA AAAGCAGCTA CACAGAGAAC AGAGTTAGCA AATGGCACCC      360
GAGACAGAAC TATAGCAGAT GCAAGAGCCA AAAACCCACA GCCGCATTGA ATTCTAGACC      420
TGCCTCGAG                                     429

```

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC TTCATGCCTT GTAACCATCA GGTAGATACA GCACCAACGG TAGTGGCTCT      60

```

```

TTATGACTAC ACAGCGAATC GATCAGATGA ACTAACCATC CATCGCGGAG ACATTATCCG      120
AGTGTTTTTC AAAGATAATG AAGACTGGTG GTATGGCAGC ATAGGAAAGG GACAGGAAGG      180
TTATTTTCCA GCTAATCATG TGGCTAGTGA AACACTGTAT CAAGAACTGC CTCCTGAGAT      240
AAAGGAGCGA TCCCCTCCTT TAAGCCCTGA GGAAAAAACT AAAATAGAAA AATCTCCAGT      300
CCTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```

GAATTCGGCC TTCATGGCCT AGGACCTCGT AGGTCCTTAC AGCACCACAG TGCTCTTCAT      60
CTCTCAGAGG ACTGAACCAC CAGCCAGCAC CAACAGAGAC ACTGTGGAAA GCACAAGGAC      120
CCGACGGGCA CTGAGTGACG AGCAGTGTGC TGCCGTATC CTTGTGCTGT TTGCTTTCTT      180
TTCCATTTTG ATTGCCTTTA TCATTCAGTA CTTTGTAAAT AAGTGAAAAT ATAACTTTAT      240
TTTTTAACTC TATTACATTT TATTTTGTCA TGTACTAAAA TTATTTCTGT ATTGCTTTNA      300
TAAAAAACAG TGGCACCTCG AG                                         322

```

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```

GAATTCGGCC TTCATGGCCT AAAAAACAC ATAATTTGAA TCAACACAAC CACCCACAGC      60
CTAATTATTA GCATCATCCC TCTACTATTT TTAAACCAA TCAACAACAA CCTATTTAGC      120
TGTTCGCCAA CCTTTTCCTC CGACCCCTTA ACAACCCCTC TCCTAATACT AACTACCTGA      180
CTCCTACCCC TCACAATCAT GGCAAGCCAA CGCCACTTAT CCAGTGAACC ACTATCAGCA      240
AAAAAACTCT ACCTCTCTAT ACTAATCTCC CTACAAATCT CCTTAATTAT AACATTCACA      300
GCCACAGAAC AACTCGAG                                         318

```

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```

GAATTCGGCC TTCATGGCCT ACAGGAAACA TACAAAGCTG CTCATAGTGG GAGTCTTTTT      60
GCTCATGTTT GTGTGCGGCC TCTTCTTCAC TCGACCTTCA GGCAGCTACT TCATCAGACT      120
GCTGAGTGAC TACTGGATAG TCTTCCCAT CATCGTCGTT GTCGTATTTG AAACCATGGC      180

```

TGTATCCTGG	GCCTATGGGG	CCAGGAGGTT	CCTTGCAGAC	CTGACGATCC	TGTTGGGCCA	240
CCCCATCTCT	CCCATCTTTG	GTTGGCTGTG	GCCCCATCTG	TGTCCAGTTG	TGCTGCTAAT	300
CATCTTTGTG	ACCATGATGG	TTCATCTTTG	TATGAAGCCG	ATCACCTACA	TGTCCTGGGA	360
CTCAAGCACC	TCAAAGAGG	TGCTTCGACC	ATACCCACCG	TGGGCACTGC	TCTTGATGAT	420
CACCCTTTT	GCCATTGTCA	TCCTCCCAT	CCCTGCATAC	TTTGTATACT	GCCGCATACA	480
TAGGATTCCC	TTCAGGCCCA	AGAGCGGAGA	CGGGCCTATG	ACAGCCTCCA	CATCCCTACC	540
CCTAAGTCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

GAATTCGGCG	TTCATGGCCT	AGTAGAGAAG	ANNNTATTGC	NCTGACAATG	AGGTTTCTAC	60
GTTCAGTGGC	AAGAGTTTTT	GTTATTCTGA	GTGTGGAAAT	GGCTTCATCC	AAAAAGAAAA	120
ACAACTTTAT	TCCACAGCCA	ATTGGAAAAT	GCAAGCGTGT	ATTCCAAGCA	TTGCTACCTT	180
ACGCTGTGGA	AGAATTGTGC	AACGTAGCAG	AGTCACTGAT	TGTTCTGTGC	AGAATGGGGA	240
TTGCTCGTCC	AACTGCACCA	TTTACCCTGG	CTAGTACTAG	CATAGATGCC	ATGCAGGGCA	300
GTGAAGAATT	ATTTTCAGTG	GAACCACTAC	CACCACGACC	ATCATCTGAT	CAGTCTAGCA	360
GCTCCAGTCA	GTCTCAGTCA	TCCTACATCA	TCAGGAATCC	ACAGCAGAGG	CGCATCAGCC	420
AGTCACAGCC	CGTTCGGGGC	AGAGATGAAG	AACAGGATGA	TATTGTTTCA	GCAGATGTGG	480
AAGAGGTTGA	GGTGGTGGAG	GGTGTGGCTG	GAGAAGAGGA	TCATCATGAT	GAACAGGAAG	540
AACACAGGAA	GCTCGAG					557

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTCA	GCCAGGTGTG	GTGATGTGCG	CCTGTGGTCC	60
CAGGTATTCA	CGAGCTGAGG	TGGGAGGATC	ACCTCAGCCC	GGGAGGTGGA	GGTTGCAGTG	120
AGCCCATATC	CGCCCACTGC	ACTCCAACCT	GGGAGACAGA	GCGAGACCCT	GTCTCCAAAA	180
AAAAAAAAAA	AAAATCCGGG	ATCTATTTAT	GTAACACTA	GAATCTTAAG	TTCAGAATTT	240
ACTCCATAAG	AGTATATAAA	AACTTACTG	TGATTTTATC	CATGTTTTTC	CTAATATATA	300
ATAGGTCTAA	GTCTTGTA	TTTCTGTCCT	GTCCACAGAG	CCTTGAAAAT	AATTAGAGC	360
TCAGTCATTC	AGTTTGGATT	TATGTATAAA	TTGAAATATA	TTAATTACTT	ATTTATAGTG	420
CAGCTCGAG						429

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC	TTCATGGCCT	AGTCCCTGAA	AAAAAAAAAA	GAAAAAAAAA	ATTAAATAG	60
AGGAAATACT	AGCTAAGTTT	AATGTAGGCC	AGTTCTAAAA	TAATGATTTA	TTGCTGCTGT	120
TGTTACATAA	TTTTCTTAAA	TATTTTAAAG	ATTGCACACT	GTCTGCTCGT	AGGCCATGAA	180

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

TACCTGCAGT	TGTACCGGGT	CACATGTGAC	CAAACCTACC	TGCTCCGATC	CCTGGATTAC	60
GTAAAAAGAA	CACTTCGGAA	TCTGAATGGC	CGCAGGGTCA	CCTTCCTCTG	TGGGGATGCT	120
GGCCCCCTGG	CTGTGGAGC	TGTGATTAT	CACAACTCA	GAAGTACTG	TGAGTCCCAG	180
GAATGTGTCA	CAAACTGAGT	TTTAGAACTG	GAAACATTTT	CTCCCAATTC	CCAGTGGGAAG	240
CTCTTGCTGT	AGAAAGATAT	TCAGAAAGGA	AACTATTTTT	CCATTATCC	ATTGTTGTAA	300
ACAGATCACT	CCAAAATGTT	AATCTTGAGC	ATAGTGGTGG	GATCATATGC	CCTCTTTTTA	360
TCCAAGCATG	TGTGTGCCGG	TCTCGAG				387

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

GAATTCGGCC	TTCATGGCCT	AGTGTCTTGA	CAATGGTTGA	GCTGGTTTGG	ATCACAGGAA	60
CATTTATTTG	ATAACGATGG	AAGGAAAAAA	CAGTGCTGTA	ATAAGTCGCT	TCTTAAATG	120
TGGGGTGTTA	TTAAAGAAT	AATGGGAAAG	TGCTACTGGG	AAGGCAAACA	CAGCAATTGT	180
ACTCTACAGA	CAGGGATTCT	CCTATTGGCC	ATTTAGAAA	CATTCCCCAG	GCAACATGAG	240
ATTATCCAAG	TGGAGAGAAC	CAGAGTCAGA	GCCATTTCT	AGGCCGACAG	AGCAGCGCTC	300
CAGATGAGAT	ACTGAAGGTT	TGAAGTCAAG	TGATGGCAGT	AAGATCAGAA	AGCAAAAGGC	360
ATATCACAAA	GAAACCATAA	GATTCTCCAT	CTGGATATAT	AGAAGATAAA	TGGAAAGAGA	420
AACTCGAG						428

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTCATGGCCT	AGAAAACCAA	ATACTGCATG	TTCTCACTCA	TAGGTGGGAA	60
CTAAACAATG	AGAACACTTG	GACACAGGGC	TGGGAACACC	ACAACTTCTT	TTTCAGTTCA	120
TAACTCATAG	TCCACGATCC	ATGTGCTCTT	TGACTTGACT	TTTCTTAAAC	TCCTATTTTA	180
TGTGCTTCTG	ACTTGCTTTC	CCTTCTTATT	TGTAATCCAC	ACTAGCCTCA	AAAGATGCAT	240
GAACTGTGAA	TTTTCACTTC	CAGGGCCATG	GATAGTTGAA	CATCTAGTAG	TGAATTCCT	300
CTTTCAGAAG	ATAAATAAAT	TCATTCATTC	CCCTGGATCT	AGAAGGACAC	ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

CAGCCTGGGT	GGCAGAGCAA	GACTCCATTT	CAAAAAAAAA	AAAAAAAAAGC	CCAAGTCACT	60
TGCTGTTTCT	GGATCCAGTA	ACGCTGCCTC	AAATTTGATT	CAGTCACCTC	ACATACTTAA	120
CATTCTGGCT	TTCTTTTCT	CTGTTTCTGG	CATCTGGAGA	TTTCCTTTT	TTGTGTGTGA	180
GCTCATTTAT	GGTTATCTGT	TGTTATGTTT	AATACAACCA	TTCCTGGCTG	AGGCTGCCAC	240
ATCTAGAGCT	GGTAAACTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTATGGCCTA	GTGATATGTC	ATAATCCCTT	CTGTGGGCTG	GGCCACATA	60
AGGAGAGTCA	AATCACTTGG	GTGCTGGGAA	GAGGCACATG	TCACACGTGC	AAGAAGGTCC	120
AAGGATGAGA	TTAAAAATTC	CACAAAGGTC	CAAATTTCTAG	GGCCCAGACA	GAAGAGAAGA	180
GTCAATCAT	CTAGATGATG	AATGAAAAGA	TATGTCATTA	TTCTCCTTTG	GGCAGTGCTT	240
CTGCAGAAAA	GTTGCACCTT	CTAGGTGTTG	GACTCAGCAA	TATATCACAA	TGTCTGCAGT	300
ATTTTGGAAG	GAGAGGAGAG	TCACCATTAC	TAGGTGCTA	GGCCCAGCAA	TACATCTCAA	360
GCACCTTCTG	GGCAAAGCCC	AAGCAGTAAA	AAAGAGTCAC	ATTACCTAGG	TTCTGGGTAT	420
AGCAATATGT	CACAAATGCC	CCTAAGAAGA	GGGCCAGGA	AAAGACTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGGCC TTCATGGCCT AGAGTGCCTG ACCTTCCCTG TTCAAGAATT TATAAAGATT      60
CCTAACAGCA ATTCTAGAAA AAGGATAAAG ACCTCCACTT GGCTTTTCAGA AGCCTCCAGC      120
ATCTGGCCCA AGCTAATACA GCCTTAAAC TAATCTGCTT ATAGCCCAGC CCCTCATTTT      180
ACAAAGAAAA CTGAGACCCC TGGCTATCTA TTAACCTGCT CCAACCAAAC ACATCATCTA      240
TCCCTCTCTT TCCTCCAGAT AACACTCACT TACCAGGCTA CAGTGAGGTC CACGTCTCTG      300
ATATGAGGCT CCTGTCCACA AGTTTGGTAA CCTTCATCTG CCTCATACC AGTGAGCACC      360
CAGCACTTAG CACTGTGCCC GACACAGAAA TGAACACTCT GCTCCTCCGG GCCGGCGTGG      420
GTGCGCCGCT GCGGCCACCG GCAGCGCTCG AG                                     452

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(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGGCC TTCATGGCCT ACAAATGGTT GGTTTATGTT ATGATAGCAA TTTTCTGCAT      60
AGCATCAGCA ATGAGTCTGT ACAACTGTCT TGCTGCACTA ATTCATAAGA TACCATATGG      120
ACAAATGCACG ATTGCATGTC GTGGCAAAAA CATGGAAGTG AGACTTATTT TTCTCTCTGG      180
ACTGTGCATA GCAGTAGCTG TTGTTTGGGC TGTGTTTCGA AATGAAGACA GGTGGGCTTG      240
GATTTTACAG GATATCTTGG GGATTGCTTT CTGTCTGAAT TTAATTAATA CACTGAAGTT      300
GCCCAACTTC AAGTCATGTG TGATACTTCT AGGCCTTCTC CTCCTCTATG ATGTATTTT      360
TGTTTTTATA ACACCATTCA TCACAAAGAA TGGTGAGAGT ATCATGGTTG AACTCGCAGC      420
TGGACCTTTT GGAAATAATG AAAAGAATGA TGGAAATCTC GAG                                     463

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(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGGCC TTCATGGCCT AACGTACTTG AAAAGGCTTT CCTTTACACT TCCAGGACCA      60
AACAGCAACT TCCTGCCACA CACTTCCACC CTATCACTGG GAGAAATCCT TTTCTGGACA      120
TGAGCCTTTG ACCTGGGTGG GGCAGAAAGA ACCACAAACT CCATCTCCCA ATAGAACTTT      180
GAAATTCACT CAGCTTTTCC TTTCATGCTG TTTGTTGCCT GCTTGTTGCA CTCCTCCTGC      240
CCCAGAACTG CAAGATTTTT AGCTTCACCC CTTTCTGAGA GTAATGTTAT CTTTTATCAG      300
AATCAGTATC AGTTCCCTCG TATTCTGTGC TTCATCGAAT TTGCAAGACT GACCTCTTTT      360
AAGCATTAA TTTACTCCCA GAATCTCGAG                                     390

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(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCCT	TCATGGCCTA	CAGTGACAAT	GAACAAAACC	AGCACACCAC	ACAAATGAGT	60
GATGAGGAAG	AGGATGATGA	TGGCTGTGAC	CTTTTGTCTG	ACTCTGAGAA	GGAGGAGGAA	120
GATATTGAGG	ACATTGAAGA	AAATACTAGA	CCTAAAAGAA	GCAGACCTAC	ATCGTTTGCA	180
GATGAGCTGG	CTGCCCCGAT	CAAGGGGGAT	GCCATGGGTC	GAGTGGACGA	GGAGCCGACA	240
ACCTTACCCT	CAGGAGAAGC	AAAACCTCGG	AAGACACTCA	AAGAGAAGAA	GGAAAGGAGA	300
ACTCCTTCAG	ACGAGTCTTC	ATCATCCAAA	CCTGGAAAGA	AAATCCGAGC	AGCTCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGGCC	AAAGAGGCCT	AGTGCTATTG	AAACATTGGT	AACAGCAATT	TCTTTAATTA	60
AACAATCCAA	AGTCTCTGCA	GATGATCGTT	GCAAAGTTCT	TATTAGCTCT	CTGCAGGATT	120
GCCTTCATGG	AATCGAGTCC	AAGTCCTATG	GGTCTGGATC	CAGACGTGAA	CGATCAAGAG	180
AACGGGACCA	TAGTAGATCA	CGGGAAAAGA	GTCGTCGCCA	TAAATCTCGG	AGTAGAGATC	240
GCCACGATGA	CTATTACAGA	GAGAGAAGCA	GAGGTCGAG			279

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGGCC	TTCATGGCCT	ACAGAACTTG	AAGCCATCAA	TAAAAGAGTA	AAAGACACTA	60
TGGCACGATC	AGAAGATTG	GACAATTCCA	TTGATAAAAC	AGAAGCTGGA	ATTAAGGAGC	120
TTCAGAAGAG	TATGGAGCGC	TGGAAAAATA	TGGAAAAAGA	ACATATGGAT	GCTATAAATC	180
ATGATACTAA	AGAACTGGAA	AAGATGACAA	ATCGGCAAGG	CATGCTATTG	AAGAAGAAAG	240
AAGAGTGTAT	GAAGAAAATT	CGAGAACTTG	GATCACTTCC	CCAGGAAGCA	TTTGAAAAGT	300
ACCAGACACT	GAGCCTCAAA	CAGTTGTTTC	GAAAACCTGA	GCASTGCAAC	ACAGAATTAA	360
AGAAGTACAG	CCATGTTAAC	AAAAAGGCTT	TGGATCAGTT	TGTAAATTTC	TCCGAGCAGA	420
AAGAAAAGTT	AATAAAGCGT	CAAGAAGAGT	TAGATAGGGG	CCCCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GAATTCGGCC	TTCATGGCCT	AGCAGTGGCG	TTGGAAGGAG	ACGCGGAGGG	GCAGTGGCGT	60
TGGAAGGAGA	AACGGAGGGG	CAGTGGCGTT	GGAACGGGGG	CAGTGGCGTC	GGAAGGGGAC	120
GCGGAGGGGC	AGTGGCGTTG	GAAGGAGAGA	CCAGGGCCGC	GGGGCTGCTT	CTTGTAAGG	180
GCCAAGCTGT	GAGGACTTCG	GGCTTTGCGG	CCGCTTTTGT	CTATGTCCCA	TCTCCTTCTT	240
TGTTTTGTTT	TTCTCAAACC	CTTTAAAAAC	GTGAAAACCA	TTTCTAGCTT	GGGGGCCCTA	300
TAAAAATAGG	CCTCGCTGGC	CCTAGTTTGA	TGACCCCTGA	AACAGACAAT	TCAAGGAGAA	360
GCTTAGTGAA	AGAGTCACTT	ATAGCTTCAT	AAAAATAAGA	GAAGATATAG	TATCCATAAA	420
ATAATAATAA	GATTGTATCC	ATGAGGTTCC	TCGAG			455

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GACATGACCC	TGGACAAAGA	ACAAATAGCG	AAGGATTTCG	TTTCAGGGGA	AGAAGAGGAA	60
GAGACGCAAT	CATCTGCTGA	CGACCTCACC	CCGTCCGTGA	CCTCCCACGA	GGCCTCCGAC	120
CTCTTCCCTA	ACCGGAGTGG	ATCTCGTTTC	CTGGCTGATG	AAGACAGAGA	GCCTGGCTCT	180
TCTGCCTCCT	CCGACACCGA	GGAGGACTCT	CTTCCTGCCA	ACAAATGTAA	GAAGGAGATC	240
ATGGTGGGAC	CTCAGTTCCA	AGCTGACCTC	AGCAACCTGC	ACTTGAACCG	GCACTGTGAG	300
AAGATCTACG	AGAACGAAGA	CAAGCTACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	TTCATGGCCT	AAGCAGCCTT	TCACCAGGGC	TCCATCTGTG	AAGAGTCTCA	60
GCCATGACTT	TGAGCTGAGC	TTGGGAGAAG	TAAAGCAACT	GTTAAGGCCA	GGCCTTGCCC	120
CTCAGACCTG	CCATGAAAGG	AATGAGCCCT	AGACTGACTC	CTGCAGCACC	CCCGGGACAG	180
GCTGGGACCA	GCTGTTTGTC	TCCAGGTGTC	AGAGTCCCTC	CTCCTCTCC	AACCTCTCCA	240
TTGAATTCTA	GACCTGCCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

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ATTTTGGGGA CCAAGAACCT GTACAAGGAT TTGTGATGAA CTTTCCAAT GGGGAAATTA    60
TCGACATCTT CAAGCCAGTG CGCAAGCACT TTGATATGCC TCATGATATT GTTGCATCTG    120
AAGATGGGAC TGTGTACATT GGAGATGCTC ATACCAACAC CGTGTGGAAG TTCACCTTGA    180
CTGAGAAATT GGAACATCGA TCAGTTAAAA AGGCTGGCAT TGAGGTCCAG GAAATCAAAG    240
AAGCCGAGGC AGTTGTTGAA ACCAAAATGG AGAACAAACC CACCTCCTCA GAATTGCAGA    300
AGATGCAAGA GAAACAGAAA CTGATCAAAG AGCCAGGCTC GGGAGTGCCT GTTGTCTCA    360
TTACAACCCT TCTGGTTATT CCGGTGGTTG TCCTGCTGGC CATTGCCATA TTTATTCCGT    420
GGAAAAATC AAGGGCCTTT GGAGCAGATT CTGAACACAA ACTCGAG                    467

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(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

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GCCATCCTCT GACAAAAGAA AGAATATGTA CTCAGGTGGA GAGAATGTTC AGATGAATGG    60
GGATACGCCC CATGATGGAG GTCACGGAGG AGGAGGACAT GGGGATTGTG AAGAATTGCA    120
GCGAACTGGA CGTTCTGTG GTGGACTAAT TAAAGACATA AAGAGGAAAG CGCCATTTT    180
TGCCAGTGAT TTTTATGATG CTTTAAATAT TCAAGCTCTT TCGGCAATTC TCTTCATTTA    240
TCTGGCAACT GTAAC TAATG CTATCACTTT TGGAGGACTG CTTGGGGATG CCACTGACAA    300
CATGCTCGAG                    310

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(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

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GAATTCGGCC TTCATGGCCT AGTGGAGACC TGGCCAAGGT ACAGAGAGCT GTGTGCATGC    60
TGAGCAACAC CACAGCCATT GCTGAGGCCT GGGCTCGCCT GGACCACAAG TTTGACCTGA    120
TGTATGCCAA ACGTGCCTTT GTTCACTGGT ACGTTGGGGA GGGGATGGAG GAAGGTGAGT    180
TTTCAGAGGC CCGTGAGGAC ATGGCTGCCC TTGAGAAGGA TTATGAGGAG GTTGGTGTGG    240
ATTCTGTTGA AGGAGAGGGT GAGGAAGAAG GAGAGGAAAA CCTCGAG                    287

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(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

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CCGCGCACCA ACAACAGCAA CAACTCCACT GCGCCGGGCT GAGGAGCAGG AATTAGGAGC    60

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TCGCGAATAA	TATGAAAGGG	ATCCGCAAAG	GGGAAAGCCG	AGCAAAGGAA	TCCAAACCCCT	120
GGGAGCCTGG	CAAGCGAAGA	TGCGCTAAAT	GTGGCCGCCCT	AGACTTCATC	CTGATGAAGA	180
AAATGGGGAT	TAAAAGTGA	TTTACGTTTT	GGAACCTCGT	CTTTTATTG	ACGGTGTCTT	240
GTGTGAAAGG	TAGGTCTGCT	TTGGGGGTCC	CCTCCGCTTT	GGATGGAGGT	GGGCTGACTT	300
GTAGATGGAG	AGAGGCTGGC	AGCTTACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

AGCCTGCCAT	CCCAGGCTTC	AGATTGGAGC	CGATACTCAA	GCAGCTTACT	GGAATCCGTC	60
TCTGTTCCCTG	GAACACTAAA	TGAGGCTGTT	GTAATGACTC	CATTTTCATC	GGAACCTTCAA	120
GGAATTTTCAG	AACAGACCCT	CCTGGAGCTG	TCCAAAGGAA	AGCCCTCCCC	GCATCCCAGA	180
GCCTGGTTTG	TGTCTCTTGA	TGGAAAGCCA	GTTGCACAAG	TGAGGCACTC	CTTTATAGAC	240
CTGAAAAAGG	GCAAGAGAAC	CCAGAGCAAT	GACACCAGTC	TGGACTCTGG	GGTGGACATG	300
AATGAGCTTC	ACTCAAGTAG	AAAGCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	TTCATGGCCT	AGTGAGTGGG	TGATATCTGT	AAAGTGCATT	GTCTTCAGTT	60
GTAGGTGGGG	TAGGTGTAAG	GGAATGGCGG	GGGGGCATGC	AATATGGGTG	AGGGAGGGCA	120
GTGCCCTTCT	CATCCCAGAC	CTGAGCCCCC	CCCAAACCT	GTCTGGACTT	TGATCAGGAT	180
AAGAACGTTG	CAGGGCGAGG	CAAGTTCCTG	AAGCCGAAGA	GGTCTGGGCT	GGGGCCTACT	240
GGAGAAAGGG	CATAGACTGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GCGAAAATAA	CCTTTTCTAA	TGAGGATGTC	TGATACTGTT	ACTGTAAAAG	ATGAAACTGC	60
AACAATGAAG	GATTTGGAGG	CAGAAGTGAA	AGATACAACC	AGAGTTGAAA	ATCTTATCAA	120
ATCAGAAAAC	TATGGGAAGA	TTTTGGTAGA	GAAGAATGAA	CATTGTATTG	AGAACAATAT	180
AGATTTGCAG	GAGAAAATTC	AGATCCAGTT	AACACAATCA	TTTGAGAAAG	AAGAGAAGCC	240

CTCAAAGAT GAAGCAGAAA AAGAAAAGGC CAGTGATAAG TTGCCAGAA AAATGTTATC 300
AAGAGATCCC AGTCTCGAG 319

(2) INFORMATION FOR SEQ ID NO:931:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC TTCATGGCCT AAAGAAGAGC AGGAAGTCCA ATGTGGCCGA AGCAGAGTGA 60
GCAAGGGCAG GAGTACCAGA GGAGGAGATA GGACGCCAAA GAGTTAAGAA AAGGAGGAAT 120
GCAGAACCTT TCCATCAAAA ATAAATAAT ACATAACCAT GGTATGTGG GGTGGGGTTG 180
TCTCTTCTT TTGGAAGAA GAAGGGCTTT CTGGGAATAG ATGGCCAGGC CAGGCAGCAA 240
GCTGCTAAAC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC TTCATGGCCT AGCATTTTCA AAAATTTCAGT GCAAGCGCCA GGCGATTGT 60
GTCTAAGGAT ACGATTTTGA ACCATATGGC CAGTGACAA AATATGAAAC AACTGTTTCC 120
ACACTTGAC CTGATCAAGG AGCAGTGCCT CTCATTGTG TTGCAGAGA AATGTTTTTC 180
ATTTCCTG TGTTCCATT TCCTCTGAA ATTCTGATT TATCCATTT TTAAGGCTC 240
CTCTTTATCT CCTTCTTAA GGCACTGTTG CTATGGCACT TTCTATAAC CTTTTCATT 300
CTGTGTACAG TAGCTTAAA TTGCAGTGAT TGAGCATAAC CTACTTGTT GTATAAATTA 360
TTGAAATCCA TTGCACCCT GTAAGAATGG ACTTAAAAGT ACTGCTGGAC AGGCATGTGT 420
GCTCAAAGTA CATTGATTGC TCAAATATAA GGAAATGGCC CAATGAACGT GGTGTGGGA 480
GGGAAAGAG GAAACAGAGC TAGTCAGATG TGAATTGTAT CTGTTGTAAT AAACATGTTA 540
AAACAAACAA AAATTGTTAT TTTCTTTTC CTTCGGTCAG AGCTCGAG 588

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC TTCATGGCCT AGGGGAAGGA AAGGCCCGTG TGGAGGAGCA TGGAGCCATC 60
TGCTCATGAA GGAAAGGCAG GGATGGGGCA GAGGTGTTGG GGCTTCCGTG CGACTCCAGA 120
GGCCAAGCCC AGAGCTGTGT GTGGAGCCCA TGAGGAGCAG AGATTTTCCA GCAAAGGTGC 180

ATTGTGGGC CTCCAGATGG AGGCCCTACC TTCTCAGCAA GGAAGAAAC CCCTCTCTCT	240
TTGACCTCTC TCCCTGCAC AATTAGAAGG TTCTGAAGAG TGAATTCATT ATTGGTGGGT	300
GAGTATATGT TTATTGGGCA TCTGTGGTGT GCCAGATGTT GTTTGAGTG CTGGGTGCAG	360
AGGTAAATGG GATATCTGGT TACCGCCAC ATGGGGCTTA TAGTGGGGGA AGTGGGGGAG	420
TAAGTCAGGA CACACGTAAG CAAACGCTAG AATGGATAGA TATTGTGATT AGAGCATTGG	480
AGAGAAAGAA CAGGATGTTT CAAGAAAGGA CAGTCTCGAG	520

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC TTCATGGCCT ACTTTTTTTC TCAAGGTGCA ATGAAAGCCT TCCACACTTT	60
CTGTGTTGTC CTTCTGGTGT TTGGGAGTGT CTCTGAAGCC AAGTTTGATG ATTTTGAGGA	120
TGAGGAGGAC ATAGTAGAGT ATGATGATAA TGACTTCGCT GAATTTGAGG ATGTCATGGA	180
AGACTCTGTT ACTGAATCTC CTCAACGGGT CATAATCACT GAAGATGATG AAGATGAGAC	240
CACTGGGGAG TTTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

AACAAATGA AACAAACAAA AGACAGAGGC CAAGAAAGGC TAAGTAACCT GCCTAAGACT	60
ATATAATAAG TCACAGGGCA GGAATAAAA CTCAGTTTTC CTGACTTCCA TTAAGGTGTG	120
CTTTTCCTCA CTCCACATTG CCTGTCATT TTTTCTGAT TATCTTAAG AAGGAGTGAG	180
GAGAGAGAAT AGAGAAACAG ATTTTTTCT CCGACTATCT TTTCTGTAGG GAAAAACCAC	240
TGAAGCCCTA TTAGCCTGGA AGCTGCTTAT AGGGTTACAA TACTGTGTGT CCTGCAGAAC	300
CTGTGAAGCT CTTCTGTATT TTCTGGACTT TCCTGGAAAG TCATTAGAT ATAATGTAAT	360
AAATATAATA AAGTAGTTTA GATATAATGA GGTTCATTAAT AGGCTTCCTC GAG	413

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC TTCATGGCCT ACCCTGAGAG TAAGCCAAAA AAGGAAGAAA AAAATATGGA	60
AGTAAATATG AAAGAGTGGA TTTTACGATA TGCTGAACAA CAAATGAAG AAGAAAAGAA	120

TGAGAATTCT AAAAGTTTAG AAGAGGAGGA AAAATTTGAC CCTAATGAAA GGTA	180
CTTACCTACA TCTTCAGCA AAACGCTGG ATGCAAAAGA ACAAGCAGCT ACCTTTAAAC TAGAAAAA	240
CAAGCAGGGC CGTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GCGAAACCGT GGTCTGCTGC AAGAAGGCAC AGGAGAACAT GAAGCAAAGG CACGAGAACC	60
AAACGCACAC CTTAGAAAAA CAAATAAGTG ACCTTAAAAA TGAATTGCT GAACTTCAGG	120
GGCAAGCAGC AGTGTCTAAG GAGGCACATC ATGAGGCCAC TTGCAGGCAT GAGGAGGAGA	180
AAAAACAAC TCAAGTGAAG CTTGAGGAGG AAAAGACTCA CCTGCAGGAG AAGCTGAGGC	240
TGCAACATAA GAGGGAGCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCT TCATGGCCTA TTCCACTACT AGGCTGACAT GCAAAATCCT AAGAGAAGTC	60
AGTCTTCCAG GATTGATCCT GGCATTGTG CTTGTGTTC CCCGTGCCTG GAGCACCTGT	120
CCCAGCTCCC CTGTGGCTGG CTCCTTCTCA CCATCCAGGG TTCAGTCCAA ATATCTCCTT	180
CAAAGAGAGA TCTTCCAGGG TCACCTAATC CAGAGAGTGC CCTCTATGGT TGCCACATCC	240
CCCCGACCCA CCACCCACCA CCCCCACTT CAATCCTTT ATGGCACCTG CCCCTCCCTG	300
AAATTCTCAC TGTGCTTAT TTGTTATCTA GCCCTCTCAT CAGAATGTAG ATCCACTGGT	360
GACAGGGGAC TTGTGTGCCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC TCCATGGCCT AGTTGTGTTT TTTGGGCTTG CTATTAATGC AAACCTCTGAT	60
TGCAAAATGGA TGTCTGTTT CATACTTTT TTATCAGGAA AAAAGCAGCA AGCCTTCAGG	120
TGTTCCAGTG ATGCCTGACA CAATTGAGCT GGACTTTATG CTGCTCTTTA CAGTAAGAGG	180
TGTTGCATTG TATGTGGGGA CTATGTGCAC TGGCGTCTAA GACAGTGACC TCAACAATAT	240
TAGCTTTGCA CAAACCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCGGCC	TTCATGGCCT	AGTGGAGGAC	TGCTTTTGTG	AACATGAGAA	AGCAGCGCCT	60
GGTCCCTATG	TATTTGGGTC	TTATTTACAT	CCTTCTTTAA	GCCCAGTGGC	TCCTCAGCAT	120
ACTCTTAAAC	TAATCACTTA	TGTAAAAAAG	AACCAAAAGA	CTTTCTCCA	TGGTGGGGTG	180
ACAGGTCCTA	GAAGGACAA	GTGCATATTA	CGACAAACAC	AAAGAACTA	TACCATAACC	240
CAAGGCTGAA	AATAATGTAG	AAAACCTTAT	TTTTGTTTCC	AGTACAGAGC	AGAACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	TTCATGGCCT	AGTATATCTG	AAAAGTACAC	TGTGTTTGA	AATTATAAAT	60
TTTCATTCTG	AATGAGGTTT	CTTTTTTTGA	TTTTCTTTAA	AAAAAAAAAA	CAACCTGCTT	120
TGATTGCTT	TACATTCCTT	GCCCTCCATT	TTTCTTATTA	TATTGTAAAC	ATTAGAAAAA	180
TGAACACCCT	CGAG					194

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 581 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC	TTCATGGCCT	AGTGAGGATA	AAGATAAGGA	ACAGGCCAGG	CACAGTAGCT	60
CACGCCTGTA	ATCCCAGCAC	TCTGAGAGGC	CGAGGCAGGT	GGATCACATG	GGGCCAGGAG	120
TTTGAGACCA	GCCTGGACAA	CATGGTGAAA	CCCCGTCTCT	ACTAAAAATA	GCCAGGTGTG	180
GTGGCACACA	CCTGTAATCC	TAGCTACTTG	GGAGGCAAGG	TGGGAAGTTT	GTTTGAACCA	240
GGAGGCAGCG	GTTGCAGTGA	GTCAAGATCA	TGCCACTGCA	CTCCAGCCTG	GGTGACAGAG	300
TACGACTCTG	TCCCAAAAAA	AAAAAAAAG	ATAAGGAACA	GACCCAACCC	GAATCCACAC	360
AACCTGACAC	ACAGGAAAGT	CTTGCCCATC	CATCCACCTA	CCTCCCAAC	CAGAGTAGTG	420
AAGCTATAAC	CCCAGAGAGA	TACCTTTGAT	GTGAGCACTG	TCCAGCATGG	GCACCAAGGC	480
ATTCACCTGC	TCCAGGAGTG	CAACCTGGGA	AAGGATAAAC	TGCTCCTCTA	AAGCAAAAAT	540
GGACAAGATA	GTTGCAGTGA	AGCAAACCTG	GGCATTGCTA	G		581

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

```

GAATTCGGCC TTCATGGCCT AAAACAGGCA ACAATGACCT TTTATTTTCT GTTTGTCCCC      50
ACCTCCCCAG CCTTCCACCT CCTGTTCTTC CTACCTTCTT CCTTTTGGAC TAAATAATCC      120
CCACCTCCCT TGATCATACA GTGAGGCTAC AGTGACTGAG GGGAGAATCC CCTCCTGTTC      180
ACTCTCCCAA CCCTGCTCCA GCCCTCAGC TTCCAGACC CTCATGCAGT TGGTTGTAA      240
TTCTCCAGT GAGCTCGAG                                         259

```

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

```

GAATTCGGCC TTCATGGCCT AAAACCTCAC GTGGCCTCTG ATTTTCATTGT GGGTGCATCC      60
ACAGGTGGCC CGAGCTGTTT TTTCAGCTGC TCCAAGGATT GAGACCCAAG TCATCATGAA      120
AAAGGCCCAA GTACAGTCTT AATGCGATAA ATCCACTAGC TAAGACGTCG AGTGCCAAGA      180
CCAGCCTTCC AGCCGAGGTT TGGACAAAGT CTCAGGTTCC CGTGACTCAG GGTAAGGTGC      240
TGGGGCTGCC AGAGGACCTG CCCAGCAAG ATTTTGTCA AGAGCGAGAC TCCATCAGCC      300
CAGGCAGACG GGAGCAGGTT CTGGCCAGC GTAGACAGCA GCAAACAGCA GCTCCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC TTCATGGCCT AGTGCAGGAG ACGCCCTCAC CGGAGATGGG GACCGAGTCC      60
ACACGGCTCT CACTGCAAAT GCTTTGGGAA AAACAAGACA GTGTACTTTG TGATCATATA      120
AAACAGCAAA ATAAAATAGT CGTGGGCACA GGGCCAGTGA TTCTGCAGTT AGAGCCGTGT      180
GGACTCGGTC CCCTCTCCGG CTCGAG                                         206

```

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

GAATTCGGCC	TTCATGGCCT	AGGTTCCCCG	GCGTGGCATG	GATGATGACA	GAGGCCCTAG	60
ACGTGGTCCT	GAGGAAGATA	GGTTCTCTCG	TCGTGGGGCA	GACGATGACC	GGCCTTCCTG	120
GCGTAACACA	GATGATGACA	GGCCTCCCAG	ACGAATTGCC	GATGAAGACA	GGGGAAACTG	180
GCGTCATGCG	GATGATGACA	GACCACCTAG	ACGAGGACTG	GATGAGGACA	GAGGAAGCTG	240
GCGAACAGCT	GATGAGGACA	AAGGACCTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

GTTTGGCTTA	GATTTGCTT	TGGTAGGTT	GCGTTTTGGG	GTTTGCCTTT	TTTGTGTGTC	60
GCTTAAATGC	AATTTGGTTG	TAAAGATTG	ATTCCTTTGT	GTTTCATCTGT	TCCGCTTCTC	120
AGCGGTCCAT	CTCAGCGTCT	CCCTTCAGGA	ACGCTGAGT	GTCCTCTCTT	AACATCCAAG	180
CCTTTTAATG	AAATCGTACT	GAAATCTGTA	TCAGCTAAGA	GTCCTCCAAT	CCTGGTCCCA	240
TTAACTCCAA	GTGCCTTTT	GACAGTGACA	ACAGACAGTC	CCTCGGCACT	CGAG	294

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

GAATTAGAAT	CTCTAAAGAA	ACAGGAGGGA	CTTCTTAAAA	ATATTCAGGT	CTCACATCAG	60
GAATTTTCAA	AAATGAAACA	ATCTAATAAT	GAAGCTAACT	TAAGAGAAGA	AGTTTGAAG	120
AATTTAGCTA	CTGCATATGA	CAACTTTGTT	GAAGTTGTAG	CTAATTTGAA	GGAAGGCACA	180
AAGTTTACAA	ATGAGTTGAC	TGAAATCCTG	GTCAGGTTCC	AGAACAAATG	CAGTGATATA	240
GTTTTTGAC	GGAAGACAGA	AAGAGATGAA	CTCTTAAAGG	ACTTGCAACA	AAGCATTGCC	300
AGAGAACCTA	GTGCTCCTTC	AATTCCTACA	CCTGCGTATC	AGTCCTCACC	AGCAGGAGGA	360
CATGCACCAA	CTCCTCCAAC	TCCAGCGCCA	AGAACCATGC	CGCCTACTAA	GCCCCAGCCC	420
CCAGCCAGGC	CTCCACCACC	TGTGCTTCCA	GCGTATCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 624 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCGGCC	TTCATGGCCT	ACTCAAAGAG	ACAACAAATA	GCATGGTAGA	ATCAATTAAA	60
CACTGCATIG	TGTTGCTGCA	GATTGCCAAA	AGTACTATTA	ATCCCGTAGA	TGCAATATAT	120
CAACCTAGTC	CTTTGGAACC	TGTGATCAGC	ACAATGCCTT	CCCAGACTGT	GTTACCTCCA	180
GAACCTGTTT	AGTTGTGTAA	GTCAGAGCAG	CGTCCATCTT	CCCTACCAGT	TGGACCTGTG	240
TTGGCTACCT	TGGGACATCA	TCAGACTCCT	ACACCAAATA	GTACAGGCAG	TGGCCATTCA	300
CCACCGAGTA	GCAGTCTCAC	TTCTCCAAGC	CACGTGAACT	TGTCTCCAAA	TACAGTCCCA	360
GAGTTCTCTT	ACTCCAGCAG	TGAAGATGAA	TTTTATGATG	CTGATGAATT	CCATCAAAGT	420
GGCTCATCCC	CAAAGCGCTT	AATAGATTCT	TCTGGATCTG	CCTCAGTCCT	GACACACAGC	480
AGCTCGGGAA	ATAGTCTAAA	ACGCCCAGAT	ACCACAGAAT	CACCTTAATC	TTCTTGTCC	540
AATGGAACAA	GTGATGCTGA	CCTGTTTGAT	TCACATGATG	ACAGAGATGA	TGATGCGGAG	600
GCAGGGTCTG	TGGTGAAGCT	CGAG				624

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GATTCTAGAC	CTGCCTCGAG	CACGCTTGGA	GAAGCCCCGT	CTCTACTAAA	AATACAAAAT	60
TGGCCGGGCA	TGGTGGCGCA	TGCCTGTGGT	CCCGGCTACT	CTGGAGGCTG	AGGCGGGAGA	120
ATCACTTGAG	CCCAGGAGGT	GGAGTTGAGG	TGAGCCGAGA	TCGTGCCATT	GCACTCCGGC	180
CTGGGTGACA	GAGTGCAACT	CCGTCTCAAA	AAAAAAAAAA	AAGCATTAC	GTCATGTCA	240
AGAGAACCTG	CTACTAATGC	TTTCTTTGAT	AGGCAGTATG	ATAGGTTGGA	AAGAATATAA	300
ACTGGGATCA	AGCTTGGGTT	CCACTTACCA	GCTGTAGTAT	GTTGAGCAAA	TTATTTAATC	360
TAACACTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GCGATTGAAT	TCTAGGGTTT	TTTTTTTTTT	GGGATCCTGG	GTAAAATTTT	ATCCAAAAAA	60
CGGGATTTTT	TTTTTTTTTA	AAAAGGAAAT	TTGAATTCAA	AATTTTGGGC	AGCCCCGGCT	120
TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTGGTGGGTT	CTGAGTCTTC	180
ACTTTATTAC	TATGTCACCA	GAAGTCACCA	CCTTCACTTG	GTTCAACCAC	GATGGATGGA	240
TGTCATAAAG	GAGGGTGCCA	CGGGGCCACT	GGATTCATC	GAG		283

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

GCTTGGCAGA TGCTAACTTC ATGGAAGATG GTAATAGGAA CAGATACTGC TCTCTGCCCC	60
TGCTTCTTGG ATTCTTCAGC TCCTACCGCT GATTCGGATT ATCCCCTTT GACCCCTCTG	120
GGGATCCAGA CTGCTGCCAG GAGGCTGAGT AGATACCTCA GTTATCTGTA TGTATTCT	180
GAGAGGCTTT GGCGGATCCT CTTCACTTGG CATCCTGTGG CATCCCTAGG GTCTGGTGGT	240
AGCAGTAATA GCAACAATGA TATCTTACAT CTGGAACAAC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCGGCC TTCATGGCCT AATTCTAGAC CTGCCTGTCT TGAGAGGAAC CTTCCTGTG	60
CTGGCTCCTG TTGTTATCTG TACCTAAGTT ACTCAGTTCT GAGTGCATGT CTGGTAAATG	120
CTGGCCATTT CTTTGAAGTT CTGACTCAGA ATCGGCCTCC ATTAGAGAAC TCAGTTCTCC	180
AAACCCAGTC ATGATCTGCC TTAATAATTGA CCGAAGAGCC ACTGATGATG GCTCAACAAG	240
CTCATTTCTCA GAAATCCTAC GAAGAGGAAC TGTATGGTA CTAACATAGG TTGGAATACC	300
TGACCGCTCT AAACGAGAAA TGGTTCGGCG AAAGCCCCCA CTATTGCTTT CAATAGTGAC	360
TGTATTTCT GCTAGCCCTA CTCTGGATCG AGTTCTATTT GCAATACTAT CCCGATCTCT	420
ATTTTCTCCA GGACGGATCC TTCTCACTTG AAGGTCCAGT GTGATTGTTG GATGTCGTCG	480
TACAGCAGTT GAGGATCTGC TGGATTCTTC TCCTTCTTCT ACTGTTATTC TTGACACAAG	540
CCTTGAATTA GAGAATGGGG TATATGCAGT ACCTCTGCGT TCTCGTTCTC TATCTTGCTC	600
TAAAAAGACT CGAG	614

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCGGCC TTCATGGCCT ACAAGGATTT CAGGATGTTT TTCCTCTGGA CTGCTCTGTT	60
CTGGGGTGGA GTCATGTTTT ACTTGCTGCT CAAGAGATCC GGGAGAGAAA TCACTTGGA	120
GGACTTTGTC AATACTATC TTTCAAAAGG AGTAGTAGAC AGATTGGAAG TCGTCAACAA	180
GCGTTTGTG CGAGTGACCT TTACACCAGG AAAAATCCT GTTGATGGGC AATACGTTTG	240
GTTTAATATT GGCAGTGTGG ACACCTTGA ACGGAATCTG GAAACTTTAC AGCAGGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```
GAATTCGGCC TTCATGGCCT AGTAGCTATT AATCTGTGGC TATGAAATGA TCAGAAATGC      60
TAAGTGAGAT CAATATTTGT TTGGAAAAAA AATCTTGGA AACACCCAA GGGTTTTCGC      120
TGTTGTGTT TTTCTTTTC TATTTTGTN NACTTAGTCC TTTAGCTAGT GGATTTAATT      180
TTGTTGTGCC TGCTTCATT TGCAATAACA ATGCAGTAGA ATTTAAACT TGGACGCTCG      240
AG                                          242
```

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```
GCTGCGCTGT ACTTCAGATA CTTTTTCGA GGAACATTG TGATTGTGG CATAAAGTAA      60
CTGTCTAAAG GAAATCTTCT GAGAGGATCT GGTCAATTTA TGAAAGGGGC AATTAAGGGG      120
AAATGGAAGC AGATCTTTTA AAGAAGGAGC ATTGAAATT AGCCAGGAA TCATGTCGGG      180
CGAGTCCTGC TCTTTGTAC CTGGGCATAA TAGTCAGCCA CACAGAGCTA GAGTTAGTTC      240
AAGAATTGTC TTTCTGATC GTGCTATATT TTTGGAAACA CGCCGTACTC GAG          293
```

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```
GCAAAGAATG GTAACGTGCT TATCATGGGA GTGTTTTGAG AAACCTAGCC AAAGCTTCAG      60
CAGAAAAATC CCCGAGAAAG ACCAGAGAGT TCTTCACCAC AACAATGTTC CTGCTCATCC      120
CTCTCATCAA ACAAGGCCAT TTTGCAAGAG TTTTGATGGG AAATCACTAG GCATCCACCC      180
TACAGTCCTG GTTTGGCACC TTCTGACTTT TTGTTTCCTA ATCTTAAAAA AATTTTTCAG      240
GGCAACTCTC GAG                                          253
```

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

GAATTCGGCC TTCATGGCCT ACAACATCAG CTCCTGTCTG GTTCTCCAGC TGCACGACCT      60
CAAACATCAA CCTCAGCTCT TCCCCGAGTC TTCTGCTGCA TGACCCTCAA TCTAGAACAT      120
AAGCTCCTCT CTGGGTGTCC ACCTGTAGGG ACCTCAAATT AGAACGTCAG CTCCTCCCAG      180
AGTCTTCAGC TGCATGACCC TCAATCTTTA ACATCAGCTC CTCTCCAGG CTGCAGCTCC      240
ATGACCCATA AAATACATGA GCAGCTCCTC CCTGAATCTT CAGCTGTACG ACCCTCAAAC      300
TACAACATCA GCTCCTGTCT GCACCTCCAG CTGCAGGGCC CTCAAACTAG AATATCAGCT      360
CCTCCCCGAG TCTTCAGCTG CACGACCCTC AAACCTAGAAC ATCAGCTCCT GTACAGATTT      420
CCAACGTAG GGCCTCAAA CTAGAACATC AGCTCCTCCC CTCGAG                        466

```

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GGAGCATGTC CTGTTATTTA TTAACTTTT CCATTTTCAT TTTTATTG GGTAAAGATAA      60
TTGCTTATGA TAAGCCTTGG GTGTGGAGAG CCGGTGCATA CAGAGTGGCG AGGCAAGCTT      120
CAATCTGCAG TCTCGAG                                         137

```

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC TTCATGGCCT AGAGCCGCGG CTCATGCGCG GTGCACAGAG GCTTGTTTCA      60
CATCTGTAAC AACAGGAGGA GGCCCGAGCCT CGTGATGAGG AATAGCAAGG AGAGAATTCA      120
GCTCCAGTTC AAAAGCCTAC AAAATCTGAG ACTGTCATTG CTTTATAAG GATTCCAGCT      180
TTCCCTCCTG GCCAGAAATG TTCAGCCTGG ACTCATTCAG AAAAGATCGG GCCCAGCACA      240
GGCAGCGTCA GTGCAAACTT CCCCCACCCC GCCTTCCACC CATGTGTGTC AACCTACCC      300
CAGAAGGAAC CCTCGAG                                         317

```

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```

GAATTCGGGC TTCATGGCCT ACTCTGCTCA ACCTGCACAT CACCCACCAC AGTCACCAGC      60
ACAAATTCAG ATGCAACTAC AGCAGGAATT ACAACAGCAA GCCGCATTCT TTCAGCTCA      120

```

GTTTCTAAAC	CCAGCCTTTT	TGCCTCATTT	TCCTATGGCC	CCAGAAGCAC	TGCTGCAGTT	180
TCAGCAGCCT	CAGTTTCTCT	TTCCATTTTA	TATACCTGGG	ACGGAGTTCA	GCTTGGGGCC	240
AGATTTGGGC	TTGCCAGGCT	CTGCCACATT	TGGGATGCCT	GGCATGACAG	GAATGGCTGG	300
CTCCTTGCTT	GAAGACCTAA	AGCAGCAGAT	TCAAACCCAA	CATCACGTTG	GTCAAACCTCA	360
ACTCCAGATA	CTACAGCAAC	AAGCACAACA	ATACCAAGCC	ACACAGCCCC	AGCTGCAGCC	420
TCAAAAACAA	CAGCAGCAGC	CACCACCTCC	ACAGCAACAA	CAAGCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC	TTCATGGCCT	AGGAGAANGA	CGTGCTGGTG	AACGTGAACC	TGGTGATAA	60
GGAGCGGGCA	GANAAAAATG	TGGAGCTGCG	GAAGAAGAAG	CCTGACTACC	TGCCCTATGC	120
CGAGGACGAG	AGCGTGGACG	ACCTGGCGCA	GCAAAAACCT	CGCTCTATCC	TGTCCAAGTA	180
TGACGAAAAA	CTTGAAGGGG	AGCGGCCACA	TTCTTCCGC	TTGGAGCAGG	GCGGCACGGC	240
TGATGGCCTG	CGGGAGCGGG	AGCTGGAGGA	GATCCGGGCC	AAGCTGCGGC	TGCAGGCTCA	300
GTCCCTGAGC	ACAGTGGGGC	CCCGGCTGGC	CTCCGAATAC	CTCACGCCTG	AGGAGATGGT	360
GACCTTTAAA	AAGACCAAGC	GGAGGTGAA	GAAATCCGC	AAGAAGGAGA	AGGAGGTAGT	420
AGTGCGGGCA	GATGACTTGC	TGCCTCTCGG	GGACCAGACT	CAGGATGGGG	ACTTTGGTTC	480
CAGACTGCGG	GGACGGGGTC	GCCGCCGAGT	GTCCGAAGTG	GAGGAGGAGA	AGGAGCCTGT	540
GCCTCAGCCC	CTGCCGTCGG	ACGACACCCG	AGTGGAGAAC	ATGGACATCA	GCACACTCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC	TTCATGGCCT	ACAACAGCGT	TAGGTTTTTT	TTTTNGTTNG	TTNGTTNGTT	60
TNGTTTTTTT	CCAACCCTCT	TTCGGATGGA	CGGGGAAAGA	GAGAAAGAAA	AANCGAGGGA	120
AAATCNACAA	AATGTGCGAT	GCAAAGAGTC	GATTTTCGCG	GGGTTTGTC	ACTTCGCCAC	180
TGCCGACGCG	GAATCGACGT	CGTCACGTGA	CGGTCTGCCT	CCGCCCTTAT	TAACTCTCAG	240
CCCAGCGGCG	GTTTCCAGGA	CCTCAGACTT	TTTGCCGAGG	CGGCAGTCCC	TAGACGAAGC	300
GAAGGAGGCG	GCGCCTGCCC	CGCCACAAG	AGCTGCCGCG	CGCGGGTGTT	ATAGCTCCAC	360
CCCATCTGCA	AAGGAAGGGG	GAGCGGAAAG	AGCGGGATCT	AGCGGGGAAC	TCGAG	415

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GAATTCGGCC	TTCATGGCCT	AGCGGGTCTT	CAGACAAGTG	GAAAAGGTGA	GAGAGGAGAT	60
CAGGGCGCAG	AGCCCCGTGG	AGGCTGAGTT	TCCATATGGG	CAACTGAGCA	CATCCTGCCA	120
CTCCACCTC	GTGCCTCAGA	ATNGACACCA	GGCTACTCAT	CTGGAGGTGA	CCAAGCAGCC	180
AACCAATCGG	GTCCCTGGA	GGTCTCAAA	TGCCTCCCCA	TACCTTGTTT	CAGACCTCGA	240
G						241

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTAATAG	CCTGCAGGTT	AATTACTCCC	TGAAGGGTAT	TGTGAAAAG	TATAACAAGA	60
TCAAGATCTC	TCCCAAAATG	CCAGTATGCA	AAGGACACTT	GGGGCAGCCT	CTCAACATT	120
TCTGCCTGAC	TGATATGCAG	CTGATTTGTG	GGATCTGTGC	TACTCGTGGG	GAGCACACCA	180
AACATGTCTT	CTGTTCTATT	GAAGATGCCT	ATGCTCAGGA	AAGGGATGCC	TTTGAGTCCC	240
TCTTCAGAG	CTTTGAGACC	TGGCGTCGGG	GAGATGCTCT	TTCTCGCTTG	GATACCTTGG	300
AAACTAGTAA	GAGGAAATCC	CTACAGTTAC	TGACTAAAGA	TTCAGATAAA	GTGAAGGAAT	360
TTTTTGAGAA	GTTACAACAC	ACACTGGATC	AAAAGAAGAA	TGAAATTCTG	TCTGACTTTG	420
AGACCATGAA	ACTTGCTGTT	ATGCAAGCAT	ATGACCCAGA	GATCAACAAA	CTCAACACGC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AACGGCTCCC	TCACTTGTTA	ATTAAAGTCA	GACACTGCCG	60
TAAGGTCTTT	CTGGTTCCTG	CTTTGTGGAG	AAAGCTTTCA	GCAGCAATAT	CTGGGATCAC	120
TGGTGTTATTA	AATGTCAGGC	CTCGCATCAT	TATTCTGCCC	TGAGCTGATG	GTAAACCGGG	180
CACCCAGCCT	TTTAGCTTTC	ATCCAGCACG	AGGGAACTTG	CCTTCAGATG	TGACACGTAC	240
AAGTCAAAAA	AGCTCAGAGT	CAGCTCCAAC	GTCTATTGGA	TCCCACTCTA	TCGCCTTTAA	300
AAAGGAAAAG	AAAATCGAAA	CGAACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGGGTCGCAG	ACTCAAATGC	CCACAGGGGC	CAGGTTAGGT	60
TAGCGGCTGA	AGCAGTCTGG	GGAGAGGCAA	AAAGCAATGG	CAGGGAGGTG	GGACAGAGGA	120
ATGTGGGCCC	CAAACATATGG	GGGCAGCTGC	TACTCAGTGC	CAGCTGTTTG	TCGCCATGGG	180
GGGAAGCGGG	ACCAGAGCCG	CCGGGTCTTC	GGCTTTTTCA	AGAGGACGCA	TAACTCCGGA	240
TTGTTATTTG	AACTGTCCTG	ACTTTGGTAA	GACTCTGTGA	CGGTGACAGT	GAAGGAGGCC	300
GACTCATCGT	CAATTCACA	CAAGTACTCG	CCGGAGTCCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGGATGCAGC	CGAAAAGGAT	CGCAAGCTTC	AGGAGAAAGA	60
GAAGCAAATC	GAAGAGCTGA	AGAGGAAACT	GGAACAAGAG	CAGAAGCTCG	TGGAAGTGCT	120
GAATAATGCAA	CTTGAGGTTG	AAAAACGAGG	GCAGCAGCAG	CGGCCCCTGG	AAGCCCAGCC	180
CAGTGCCCCA	GGTCATTCTG	TCAAGTCAGA	TCAGAAGCAC	GGCAGCCTTG	GCTCCTCCAT	240
CAAAGATGAG	GCCTCACTCC	CTGACTGCTC	CAGCTCCAGG	CAGCCCATCC	CAGTAGCCAG	300
CCACGCTGTA	GGCCAGCCCC	TCTCTACAGG	TGGCCAGACC	CTTGTTGCCA	AAAAGGCTGT	360
AGTTATCAAG	CAAGAGGTCC	CTGTGGGCCA	GGCAGAGCAG	CAGAGTGTG	TCTCGCAGTT	420
TTATGTGAGT	TCCCAGGGAC	AGCCACCGCC	TGCTGTTGTT	GCTCAGCCCC	AGGCTTTACT	480
GACCACGCAG	ACTGCTCAGC	TGCTGCTCCC	AGTGTCCATC	CAGGGCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GTGCCTCGAG	AAACTGCCTA	TTCAGAAACA	CAGAAACACC	GAGACCTCAA	AATCCCCTGA	60
GAAGGACGTT	CCCATGGTAG	AAAAGAAGAG	CAAGAAACCC	AAGAAGAAAG	AGAAAAACA	120
CAAAGAGAAA	GAGAGAGACA	AGGAGAAGAA	GAAGGAGAAG	GAGAAGAAGG	CTGAGGACCT	180
GGACTTCTGG	CTGTCTACCA	CCCCACCGCC	TGCCCCCGCC	CCCCCCCCCG	CCCCCGTTCC	240
ATCCACGGGG	GAGCTCAGTG	TGAACACTGT	CACTACCCCG	AAGGACGAGT	GTGAGGACGC	300
CAAGACGGAG	GCGCAGGGCG	AGGAGGACGA	TGCCGAGGGG	CAAGACCAGG	ACAAGAAATC	360
TCCCAAGCCT	AAGAACAAGA	AGCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC TTCATGGCCT AGCTTACACT GGGCCAAGTG CTTGCCAAGG ATTTCATGT      60
GACATTCTTT TCAGTCCTGC CGAGGACTTT ATGAGGGAAG CACCCTGTTT TACAGAGGGA      120
AGGGGGCCTA TGGGGTCTAC AGCAGTGAGA GCCTAGAGTT CAGTCTGCGT CTCTCTGATT      180
CCAAAGCCTG TGATTGTGAC TTCCATACTC TCCCTAAGAC ACATTTCATC ATTCAACTGA      240
ATATTTATTG AGCACCTACT GTGTGCTAGG GATAGAGCAG TAAATGAATC AGGCAAAAAT      300
TATTTACATT CCACTGGGGC TGACAAACCC AAACAAGGAA GAGGTGTAGT GCTTCGGGTC      360
TCGAG                                     365
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GCAAAAGTAA TATGATTGT TAAAATACT CAGTCAACAG GTATTCCTG AAAATATTTT      60
CCATAGAAAG TAGAATATGG TTCTCCCGAA TAAAAACTGA TCCATTTTAC CTTTTCTTT      120
CCCTTTTGT TNNGGTATTT TTTTCTTTT TTTTCTTNN GCTTTTTCCT TTTAACTTTC      180
CAGCCAAAGG CTTCTATGAT CTTGATGCTT TAAATGAAGC TGCTTGGACA AGTGCCCAAC      240
GCCAGTTGGT TCCCTGTAAT GTTTGTGGGC GTACCTTCCT GCCAGACAGA CTGATTGTTC      300
ACCAACGATC TTGTAAACCC AAAGCTCTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GCGCCCTCAC CCCTCCAATC CCCCCTCTGA CCCCCTCTTC CTCACATGGG GTCGGGGGCC      60
TGGGAGTTCA TTCTGGACCA GCCCACCTAT CTCCATTTC TTTTATACAG ACTTTGAGAC      120
TGCCATCAG CACAGCACAC AGCAGCACCC TTCCCTGAG GCCGGTGGGG AGGGGACAAG      180
TGTCAGCAGG ATTGGCGTGT GGGAAAGCTC TTGAGCTGGG CACTGGCCCC CCGGACGAGG      240
TGGCTGTGTG TTCACACACA CACACACCTC GAG                                     273
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

```

GAATTCGGCC TTCATGGCCT ACTCTGTCTC AAAAAAAAT AGTAAGTTGT GTAAAGAAAA    60
ATATTAATTA TATAATATGG CAGTTCCTAT GAGAGTGTGG CAAAAATCAA GAGGGCTTGG    120
AAGTTTTTTC TTTGCTCTTG CAACTGGCTG GATGCAGTTC ATATATTTT CAACCACTAG    180
GTGGCACCCC AACCTAATTT TTTGCAGTTG TAACCTGGTG GCAGAAGGGG CAGGACTGAT    240
GGCTTGGGCA AGACTGTTAT GCCAAGTTCT CGAG                                274

```

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

```

GAATTCGGCC TTCATGGCCT AGTGAGATAG TACCAGATT AGAATATAAT TTTATCTTTC    60
TTTAGCAACA AGCCCTAACA ATATCCAAAC TAAATAAAAT CATTACATGA ATTACTTTT    120
TACAATCATT CTCCTAAGGC TCGAG                                145

```

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

```

GAATTCGGCC TTCATGGCCT AGGAAATAAC AGTTATTCA TCATAAAACA GTCCCTTCAA    60
ACACACAATT GTTCTGCTGA AGAGTTGTCA TCAACAATCC AATGCTCACC TATTCAGTTG    120
CTCTGTGGTC AGTGTGGCTG CATAGCAGTG GATTCCATGA AAGGAGTCAT TTTAGTGATG    180
AGCTGCCAGT CCATTCCAG GCCAGGCTGT CGCTGGCCAT CCATTCAGTC GATCATCTCG    240
AG                                242

```

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

```

CATGTGCACA CTCGCACATG CACATATGGG CACGTGGGAA GACGGGAGAA GTACTGTCAA    60
AGTATAAGGA ACTGCAGAGG TTGGGATTGA CTGGAAGGGA AGGGAGCACA CTCGAG    116

```

(2) INFORMATION FOR SEQ ID NO:977:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```
GAATTCGGCC TTCATGGCCT AGCATGGCAA CAGATATGTG GAGCATTGGA GTGTAAACAT      60
ATGTCATGCT TACAGGAATA TCACCTTTCT TAGGCAATGA TAAACAAGAA ACATTCTTAA      120
ACATCTCACA GATGAATTTA AGTTATTCTG AGGAAGAATT TGATGTTTTG TCTGAGTCGG      180
CTGTTGATTT CATCAGGACA CTTTATGTTA AGAAACCTGA AGATCGAGCC ACTGCTGAAG      240
AATGTCTAAA GCACCCCTGG TTGACACAGA GCAGTATTCA AGAGCCTTCT TTCAGGATGG      300
AAAAGGCACT AGAAGAAGCA AATGCCCTCC AAGAAGGTCA TTCTGTGCCT GAAATTAATT      360
CGGATACCGA CAAATCAGAA ACCGAGGAAT CCATTGTAAC CGAAGAGTTA ATTGTAGTTA      420
CTTCATATAC TCTAGGACAA TGCAGACAGT CAGAACTCGA G                                461
```

(2) INFORMATION FOR SEQ ID NO:978:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```
GAATTCGGCC AAAGAGGCCT AATGATGATG AATAAGTTGG TTCTAGCGCA GTTTTTTTTT      60
TTTCTGTGCT ATAAAGCATT TAACCCCCCT GTACACAACT CACTCGAG                    108
```

(2) INFORMATION FOR SEQ ID NO:979:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 505 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```
GATGGCGTCG GGCAGCGGGA CAAAAAATT GGACTTTCGC CGAAAGTGGG ACAAAGATGA      60
ATATGAGAAA CTCCCCGAGA AGAGGCTCAC GGAAGAGAGA GAAAGAAAG ATGGAAAACC      120
AGTGCAGCCT GTCAAGCGAG AGCTTTTACG GCATAGGGAC TACAAGGTGG ACTTGGAATC      180
CAAGCTTGGG AAGACAATTG TCATTACCAA GACAACCCCT CAATCTGAGA TGGGAGGATA      240
TACTGCAAT GTCTGTGACT GTGTGGTGAA GGAATCCATC AACTTCTGG ATCACATTAA      300
TGGAAGAAA CATCAGAGAA ACCTGGGCAT GTCTATGCGT GTGGAACGTT CCACCCTGGA      360
TCAGGTGAAG AAACGTTTTG AGGTCAACAA GAAGAAGATG GAAGAGAAGC AGAAGGATTA      420
TGATTTGAG GAAAGGATGA AGGAGCTCAG AGAAGAGGAG GAAAGGCCA AAGCGTACAA      480
GAAAGAGAAA CAGAAGGAGC TCGAG                                505
```

(2) INFORMATION FOR SEQ ID NO:980:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

```

CGAGGGACAT GAGGCTGAGC TGGTCCAGG TCCTGACAGT ACTGTCCATC TGCTGAGCG      60
CCGTGGCCAC GGCCACGGGG GCCGAGGGCA AAAGGAAGCT GCAGATCGGG GTCAAGAAGC      120
GGGTGGACCA CTGTCCCATC AAATCGCGCA AAGGGGATNT CCTGCACATG CACTACACGG      180
GGAAGCTGGA AGATGGGACA GAGTTTGACA GCAGCCTGCC CCAGAACCAG CCCTTTGTCT      240
TCTCCCTTGG CACAGGCCAG GTCATCAAGG GCTGGGACCA GGGGCTGCTG GGGATGTGTG      300
AGGGGGACCT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```

GAATTCGGGC TTCATGGGNT ACTCATTGCT ACATTGCTAG TTGACCCGCA GTTATATTTC      60
CTTTTITTTCT TTTTAATAAA AGGCAAGAGA AACAAATCCGT TTTTGCCTTT TCCTACCACA      120
TCTTTGACTT TTCTGATTCC TGCAAGTTTA AGTTAAAAAC ATCCTACCTT CAAGCTACAA      180
AATGCAGCAC ATCCCAGGAC ATCCCTCACC TGCTTTGCTT GTTTATTAGA CACAAGTGGC      240
TTTGTTCAGA AAGTTACTGG GAACCGCTAA GGATAGTCAA GGTGGAGAAC ACAGGGTGGG      300
GTCTCAGAGT CTGAGGCCTT GGTTCAGGTT CCTGATAACA TTAAATATAG AAAATACACA      360
GCACAAGGCC AAATCGAG                                     379

```

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

```

GAATTCGGCC TTCATGGCCT AGAAGATGGT AAGGTTGCGA TCTTCGGGT GATGGGAGTT      60
AAGTGTAAC AGGAAGTGGG ATTTAAGGGC CACACTTCAG GGGTATCCCA GGTCTGCTTT      120
CTCCAGAAAT CCTATTGCT GCTTACTGGA GGAATGATG GGAAGATCAC GTTGTGGGAT      180
GCAACAGTG AAGTTGAGAA AAAACAGAAG AGTCCACAA AACGTACCA CAGGAAGAAA      240
CCTAAAAGAG GAAGTTGCAC CAAGCAGGGT GGAAATACTA ACGCTTCAGT AACAGATGAG      300
GAAGAACATG GCAACATTTT ACCAAAGCTA AATATTGAAC ATGGAGAAAA AGTGAAGTCG      360
AG                                     362

```

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 574 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GAATTCGGCC	TTCATGGCCT	AGGCCACTGA	TATTTTCTA	AGTTAGCAAG	GCTCACTTGC	60
TTGCTTTCTT	GCCTCCCTTG	CCTCCATCCC	TCTCCCTTCC	TACCTTCTCT	ATTACCTAT	120
TTCTCTCCCT	CCCTCTCTTC	TCCTCTCTTT	TTTTTTCCCC	CGCATATGCA	GCTTTTGTAT	180
TGTACTTGAT	TTTATAGAGA	CTGCACAGTT	CCAGCAAGAT	TGGGAGTCAG	GCATGGAGCA	240
GGCATCTCAG	GCTACCAGAA	AGAATTGGTC	ACCTAGACTT	TCAGTCAGGC	ATCCTCGTTT	300
GCATTGTCCT	GTAAGTCAAT	TAGTTGATAA	ATAGTTCCCC	CTTCATCCCT	TAAGTTTGT	360
TTTTGTTTT	GTTTTAATA	TAGGTAAGTG	GGACTCTACC	TAAAATTTTG	CATCATACTT	420
ATGGGTAATA	TCTTTTTCAT	ATATTATTTA	TCAAAGTATG	AAGTTGAGTA	TTTTGCTTGT	480
ACCATTTCAA	TTCTGCATTA	TAGTAGTTCA	TTGTATAACT	GAAAGAAATG	ATTTCTTCAT	540
AAGTGACATT	AAATATGAAC	ATTCATCTCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	ACGATTGAAT	TCTAGACCTG	CCCCCTCCCT	CCATGCCTCA	60
TCCCCCGCCC	CCTCCAGTCA	TGCCGCAGCA	GGTTAATTAT	CAGTACCCTC	CGGGCTATT	120
TCACCACAAC	TTCCACCTC	CCAGTTTAA	TAGTTTCCAG	AACAACCTTA	GTTCTTTCCT	180
GCCAGTGCT	AATAACAGCA	GTAGTCCTCA	TTTCAGACAT	CTCCCTCCAT	ACCCACTCCC	240
AAAGGCTCCC	AGTGAGAGAA	AGTCCCACT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	TTCATGGCCT	AGATAAGGAG	ACTTCAGAAG	AGAAGCCGCC	AGCTGAGGGA	60
AGTGAGGACC	CTAAGAAGCC	ACCCCGCCCT	CAGGAGGGAA	CAAGATCTAG	CCAGCGAGAT	120
CAGATACTCT	ATCTCTTTGG	GAGAACTGGC	CGAGAAAAAG	AGGAATGGTT	TAGGAGATTT	180
ATTCTGGCAT	CTAAGCTAAA	GTCGGAAATC	AAGAAGTCAT	CGGGTGCTC	TGGAGGTAAA	240
CCAGGGCTTT	TGCCTGCACA	CAGCAGACAC	AACAGTCCGT	CCGGGCACCT	GACCCACAGC	300
CGCAGCAGCA	GCAAAGGCAG	TGTGGAGGAG	ATCATGTCAC	AGCCAAAGCA	GAGGGAGCTA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCC TTCATGGCCT ACTCTCTTCC AACCAAAAGT CTTAATATGG GAATATCCCT      60
CACCACGATC CTAATACTGT CAGTAGCTGT CCTGCTGTCC ACAGCAGCCC CTCCGAGCTG      120
CCGTGAGTGT TATCAGTCTT TGCACTACAG AGGGGAGATG CAACAATACT TTACTTACCA      180
TACTCATATA GAAAGATCCT GTTATGGAAA CTTAATCGAG GAATGTGTTG AATCAGGAAA      240
GAGTTATTAT AAAGTAAAGA ATCTAGGAGT ATGTGGCAGT CGTAATGGGG CTATTTGCCC      300
CAGAGGGAAG CAGTGGCTTT GCTTCACCAA AATTGGACAA TGGGGAGTAA ACACCTCAGGT      360
GCTTGAGGAC ATAAAGAGAG AACAGATTAT AGCCAAAGCC AAAGCCTCAA AACCAACAAC      420
TCCCCCTGAA AATCGCCCGC AGCATCTCGA G                                     451

```

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

GAATTCGGCC TTCATGGCCT AGAGAAACTG AGCAAAAATA GCTGCCAAGA GAAGAGGGAA      60
CGAGTGCTCG GGGCGGGTTG GAGGCAGATA ACGAGAAGGC AAGAAAATTC TTTGTCTTTG      120
GCTCCTGCTG TCAGCTCAGA GGGGTCATCT TGAGATGAAA AAGAAAAGTC CCCAGCCTTG      180
GGGAAGGAAA CGAGAGGGTG CCCCACGCAG ATATGAAGCA AAGCCATTGG CAAGATATTC      240
TCTCTAAGGA GAGCAGCGGT CTTGCCAAG GCATCTTCTA TTGTGTATTG CCGTCATAAA      300
CCCTACCCTT CCATGTAGAT AGCCAGGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT AAGAGAAACA AAAATGATTT TGCTTTCCAA GCTTGGTTTG      60
TGGCGTCTCC CTCGCAGAGC CCTTCTCGTT TCTTTTTTAA ACTAATCACC ATATTGTAA      120
TTTCAGGGTT TTTTTTTTGA TTTAAGCTGA CTCTTTGCTC TAATTTGGA AAAAAAGAAA      180
TGTGAAGGGT CAACTCCAAC GTATGTGGTT ATCTGTGAAA GTTGACAGC GTGGCTTTTC      240
CTAAACTGGT GTTTTTCCCC CGCATTGGT GGAATTTTAT TATTATTCAA AAACAAAATG      300
AAAAGGTTAT TACTTTTTTT TTCTCTGAAA TGCTGACAAT ATGTGATATC TTAATATCTG      360
TAATTCCTAG TGAAGTTAT GGTATAGTAT AGGTGAAGCT GTAGTGTTA TATCAATAGA      420
TGTGAATTCA AATGAGCAAT CTAATAATTA TTTACTATTC AATTATGTTA ATTTTCTTCT      480
CTTTGTCTCC CATTGTATCT GCACTCGAG                                     509

```

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC TTCATGGCCT AGGCTTGTGG GCAGGGCCCC TGCAGGTCAT GGAGCCGGTA      60
GCATCTCAGA GCTGGACAGA GGAGGTAGGC TGGGAGCAGG CCCGTTGGG GACCAAGTGGC      120
CCCTGCACAG GAGCCAGAGG GCCTGGGCAG CTGTCTGTCC AGAAAGCATG CAAGACCCCG      180
TGCCACCCGG GCACACAGGG CTGTCGTGTC TAGAAAGAGA TCTCCTGGGG TCACGGGCAG      240
GCAAAGCTGA TTGATTTTGG CCGTGAAGTT TGACCTTGTG ATGGAAACCG AGCTCCCAGG      300
GAGTGAGACA AACTGCCTCC CCGTGTCAGT GGCCAATAAA CTTGACTTGG TTTTACAGCC      360
CCGAGAAATT GCTCACTAAT AGCCAGACAG ATGCTCCCCC TGCCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC TCATGGCCTA CCCAAATCTG AAGTCTTTGG ATATGTTACT GCTGAAGTTT      60
CTATCACTTC TCACTCCTGG TTCCTTGTTT CCCTGTATGC TTTTTTTTTT TTTCCATGAG      120
TTCACCTTTT TAAATTATAG TTCTTCAAGG CCTAGGATGC AGGTGTGTTC TTCCATAAAG      180
GGCTATTTTG CCTCTGCCGA GGTCTCGAG      210

```

(2) INFORMATION FOR SEQ ID NO:991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC TTCATGGCCT AGTAGATAGT ACAAATTTCA ACAGATATCA AAGTGTGTTA      60
AGTTTACCTT TCCACCCACT TTCTCATTTT TGTCTCCCC AGTTCCTTTT GCATTATTCC      120
ACGTATATTC TGTGCATATA TACATTCATA TACATTATC TGTATGTGTC AGCTTCTTTT      180
TACACAAATG ATACATAAAC ACTGTTCTGG ACCTTCCAAC TTAGAATTAC TGCAAACAGT      240
GTCGTGATGA ATTACCTAAT TCTGTGTATG TGTGTATATT GGTAGAAAAA ATTCCCGGAA      300
GTAGAATTGC TAGAACAAG AATTATGCAT TTAAATATT CCTTTATTAT AAAACTAATG      360
AAAGTAAACA TGTGGCTAT GACCAGTAT GCTCTATGCT CAGTTTTTCT AGAGTTGTGT      420
ATGCTTAATA TAGGAGCCTG CCTCGAG      447

```

(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT AGCCCATTTGT TGTATTATTT GAATTAATTT CAAGCTTACA      60
GAAGAATTAT AAGAATTATA CAAAGAGCCC TTGTATAGCC TTCATCCAGA TTCCTCATT      120
ATAGTTATCT CCCCCACACA CGTAATGCAC AGACACTGCA TGCATTTTCC TTTTCTTTT      180
TCTCTTCTTT CTTTCTCTTT TTCTCTCTTT CCCTTTCTCT TCTCCCTCCC CTCCCCACCC      240
CTCCCTCCC TTCCTCTCCC TTCCCTCCT CCTACTTCAG CCTCTAGAAT AACTAGACTC      300
GAG                                                                303

```

(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGATTGGT AGGGTAACTT GAAACTGAG TTAAATGAGA      60
AAGGTAGAAA AAATTCGTAC TTTTCTCCT CCCCACAAA AATAAAACA GTAAATCTT      120
TACCAACTGA AAAAGCTGTT GAAATTTTCT GTATGTTAA AAAATGAGCT TTGCAGTAAC      180
TCTTAAATC ACCTAGCAAA ATAGGAACTA TAATGTGCAT CTTTCCTTCA CTAAACATT      240
TATTGCATCT CTCTTGATG CTGATGATTG AGGACACACA TTCTGCTTTC CTGGGGCTTA      300
TGGTTTATA TAAAACCAA AGCAAAGTAG AAAGTATACC TCCTACCAAG GGGCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

```

GAATTCGGCC TTCGGCCTTC ATGGCCTAGA GGAGGACCAA GGCTTCAAAG GCCCCTGCCC      60
GCGCGTCCTG CAGGTTCCCA TTGTCCGTGT TAATAGCCTC AGATGGGCAT CAGTTGCCCT      120
GATGGGCTTG GGCTCCACGC CCGGGCTTGC ATGTTTGGCA AAATTA CTCA AGAGCATTT      180
TTTTTTTTT CTTGAGACT CCGTCTCAA AAAAAAAAAA AAAGAGATCC TCAGCTGTTG      240
TTTCTTGAAT CAGATATTG GATCACTCTA GCATCCAATC ATGCAGCTCC TAAATATGCT      300
CCTAAATCAT GCAGGTCCAA TCACGCACCT GTTTTACGGT TTATCAATTT GTGCTCATCC      360
TGAATAAAT AACAAATCC ATGAGCCAAC TGCAGCACA CTCGAG                                                                406

```

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

```

GAATTCGGCC TTCATGGCCT ACCATCTTGG AACCTCCTCC CATGATTGCC TTATTATTTT    60
AAATACATTA ATGTAGATCA ATGAAGAATA AGAAAATAAG CAATTTTATT TTACCTTAAT    120
TTATTCTGTT TCTGATGCTC TTTGTCTCTC TATGTAGGTC TGACTTTTGT ACCTACATTA    180
TTTTCTTTCC CTCCTAGGAA TTTTAAAAAG CATTTCTTGT AAGGCAGGGC TACTGAAAC    240
AAATTCCTC AATATTTGCT TGTCTACAAA AGTCTTTATT TCTCCTTAC CTTTAAAGGG    300
AAATTCACA ACCTACAGAA TTCTAGGTTG GTGGGTTTTT TCCCCCTCA TCCCTTAAGT    360
ATTTAATTCC TCTCTCTTG CTTGCATGGT TTGTAAGGAA GAGTCAGATG TAATTTTAT    420
CTTTGCTTCT GTATGGGTAG GGTGCTTTTT CTCTAGATT TTTTTCAG AGTTTTTTTC    480
TTTATCTTTG ATTTCTGTA CTTCAAATAT ATTATGCCA GGTATAGATT GTTTTTGT    540
CTTGTTTTGT TTTCAATTGG CATTTGTTCT GCTTGGTGT CTCTGAGCT CCCGGATCTC    600
GAG                                                                    603

```

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

```

GAATTCGGCC TTCATGGCCT ACAGAGAATG AAACATGGAG CTCACATTCT GATGGGGGAG    60
AAATAAAAT CATATCAGAT GGTGATGAGC TTTTCGGTTT TCTATTTCTA TTTATGAAGA    120
ATAAAATAAG GTAATAGAGA TAATGTGATG AAAATTCTAA CATTCTCTAC CTTTCCTGAA    180
TTCTTAATCT ATACCTTCTG TTCTTACATT TTCTACTTAA TTTTATTTAA TACAACCTGT    240
AGCTAAACTT TTATTTTCTT TTCACCTCTG ATTCTTAACC CCTATCCATG CTAATTTTGT    300
CCTTCACTAT TCCACAAAAC TTACCCACTG TCGTATTATT ATCTTCTATT AAAAGCCAGT    360
ATTCTCTTTT CAGTTTTTAT CCTTCTTGAT CTACACTGAA CATGATTGCC TTTCTCTCTC    420
TTATATCACT TGCTGCTATC TGCAGTCAA CTAGCCTCGA G                                     461

```

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```

GAATTCGGCC TTCATGGCCT AGTGATTGG GTACAGACAC AGCCAAACCA TATCATTACA    60
GATATAAATC TCTGAGTAAA TCCGGTGTTC GATTCTTCT AGCTTTTGTAG CTTATGAGTA    120
GAGGTCTTTC TCCTCTACTC CAAGAATTTT CATAGACACA CCACTTAGTA CTTACGTTTA    180
CCACCATGTG TATTATTTT AAGAATGTAC TACTTTATAT TTTTAAACAT GAAGGACTAG    240
CTCAAAATTT TGTAGCTTCC CCCCCGCCC CAATCTTTT TTTTITTTT ACTCCTTGT    300

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GATGGGTAGT GGTTTAAAGA CAGCAAAACA TGACCTTAAC CAGAACACTA ACTAGCTTTA	360
TACATAATTC AGCCTATGAA CATGTATCTG GCAAGAGAAA TTCCTGATCT GTGGTTCGGC	420
AGATCCATGA GAGCTGCTTC TCCGGATTTT CTTGCTGGC CCCTCTCGAG	470

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

TTTAAAGAGA GTTGCGTTAT TTTCTCCAAA AGCATTGTGT GAGTTGGTCA TTTTGACAGT	60
TAAGTGTCCG TTTTACCTG CATTCTAGG TGCTAAACT TACAAGTGT TCTCTGAAC	120
ACAGGCATTG ATCCTCTACC AATGAATAAT TGAGAGAGGT AGGAATGACT GATTTTCTA	180
GTTGTAGTTT GAAAGATTAA TTTGATGAAT TGGAAAGTAT GGAAACTATT CTGTTACTAT	240
TGCAAAGAAA GATTTATTTT TTTAAAAAAT TTATTTTAT TTATTTTAT TTATTTTAT	300
GGGCAGGTCT GGCTCTGTCA CCCAGGCTGG AGTGCAGTGG CAGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GGAGTATTGT TACAATCACA TTTGAAGTAC CAGGAAATGC AAAGGAAGAA CATCTTAATA	60
TGTTTATTCA GAATCTCCTG TGGGAAAAGA ATGTGAGAAA CAAGGACAAT CACTGCATGG	120
AGGTCATAAG GCTGAAGGGA TTGGTGTCAA TCAAAGACAA ATCACAACAA GTGATTGTCC	180
AGGGTGTCCA TGAGCTCTAT GATCTGGAGG AGACTCCAGT GAGCTGGAAG GATGACACTG	240
AGAGAACAAA TCCATTGGTC CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GTAATGGGAG ATGGACATCC ACTGTTTCAT AAGAAGAAGG GGAACAGAAA GAAGCTAGTA	60
GAGCTGGAGG TGGAGTGCAT GGAAGAGCCT AATCACCTTG ATGTGGACCT GGAGACCCGG	120
ATCCCTGTCA TCAATAAGGT GGATGGTACT TTGCTGGTGG GTGAGGATGC CCCTCGCCGG	180
GCTGAACTGG AGATGTGGTT ACAGGGTCAT CCAGAGTTTG CTGTTGATCC CCGATTCTA	240
CGGTATATGG AGGATCGCAG AAAACAGAAG TGGCAAAGAT GTAAAAAAA TAATAAGGCA	300
GGACTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```

CACGTCAGGA GAATAGAATG GAAAATTTT ATTCAACAG AAAGAAGTTA ATTTAGAAAA    60
TTAGTTTAAA ATACATTGGA AAACCTTAAAG AGCAAAAAGC ATTTGTAAAC AAACAAAAAA    120
TAAACCAAAA AAACCCTGAT GAGGTTACTA CTAATAGTAA CTGTAGGAGG CATCTACCTC    180
CCTAGATTGG GGAAAGAAGT AGTGGTTGAA TTATCAGAAC CTAGAAGCAC AGAACAGGGG    240
CCCCCTAGAA TGTGTTCTCA GACTCCTGAG GGAAGGATGC TACCCAGCTA CAGCTGGTTC    300
CTCGAG                                           306

```

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC TTCATGGCCT ACACCCTGCT AATTTTGTG TTTTITTTTG TAAAGGCTGG    60
GTCTCACTAT GTTGCCCAAG CAGGGTCTCG CTATGTTGCC CAAGTGGGTC TCGAACTCCT    120
GGGTTCAAGC AATCCTGCCT CGGCCTCCCA AAGGGCTGGG ATTACATGCA TGAGCCATCA    180
CATCTGGCCC CCACCATCT TAAAGTCAG AAATAAAAGC CAGAGCCCCT CCTTGACCTC    240
CTGGCCCCCT CCGCTTTATC ACCCCACCTC TCTGCCTGTC TTTATTGCAA AACCCCCAGA    300
AGGTTATCAG GCTCATGGTC TTCCCTCCTG TCCACACTGC CCCAACTACA CAATGAGATG    360
CCCCCATTCC AACTCCCCAG CCTCCTCTGC TGGCGTCTCC TCCTTCCTAA TCTCTGAACA    420
TTGTCCCATC CAAGGGCTCA GTCCAGGTC CGTTCACCCC TTGTCCACAC TCACCCTGAG    480
AGCTTCCAGT CTGTGGCCTC CATGCCCTGG AATGAGCCCC TGTAAGATCC ACAATCTCGA    540
G                                           541

```

(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAAACGCCTC CTGATTTTGT CTTACAATGG AACTTAAAAA GTCGCCTGAC GGTGGATGGG    60
GCTGGGTGAT TGTGTTGTC TCCTTCCTTA CTCAGTTTTT GTGTTACGGA TCCCCACTAG    120
CTGTTGGAGT CCTGTACATA GAATGGCTGG ATGCCTTTGG TGAAGGAAAA GGAAAAACAG    180
CCTGGGTTGG ATCCCTGGCA AGTGGAGTTG GCTTGCTTGC AAGTCCTGTC TGCAGTCTCT    240
GTGTCTCATC TTTTGAGCA AGACCTGTCA CAATCTTCAG TGGCTTCATG GTGCTGGAG    300

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GCCTGATGTT GAGCAGTTTT GCTCCCAATA TCTACTTTCT GTTTTTTCC TATGGCATTG	360
TTGTAGGTCT TGGATGTGGT TTATTATACA CTGCAACAGT GACCATTACG TGCCAGTATT	420
TTGACGATCG CCGAGGCCTA GCGCTTGGCC TGATTTC AAC AGGTTCAGC GTTGGCCTTT	480
TCATATATGC TGCTCTGCAG AGGATGCTGG TTGAGTTCTA TGGACTGGAT GGATGCTTGC	540
TGATTGTGGG TGCTTTAGCT TTAAATATAT TAGCCTGTGG CAGTCTGATG CGACCCCTCG	600
AG	602

(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

GCGGCAATGA TACCCACTGC CAACCAACAA AAATGGCTG CAACCATCCC CTACCAGGAC	60
CGAGCCCCTA CAGGTGAGCG GCTCTGCCAG GCCCTGGCTC CTGCCCCGAT GCACCAAGC	120
CGGAGCCTGG GGCAGCTCCT ACGAGGCTCA CCAGGGCCCC AGCAGGATGC CTGGGTCCCC	180
TGCTCCTGCT TGGCCAAAGG GAAGAGGAAG CAGCAGGCAG GGGCTGGGGA GGCCTTCATG	240
AATTACATGA ATTATCCTTC TTTTTTTTTT TTCCCTTT TTTTTTTTTT TTTTTTTTTT	300
TTTTTTTTTT TTTTTTTTTT TGAGANNCCA NTTNAAAAA AAAAGGGGG GGTGTCAGGG	360
TTTCATTCAG AGCTCGAG	378

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

GAATTCGGCC TTCATGGCCT ACTGTTTAT TTCCTGCTT TATTTGCTT TTGAAATCTT	60
TTTCCTTGGT GGATTTGTAC GTGTCTTAC TAGATGCCTC AAATTAAGTC TGACCACAAT	120
CCTACTCTAC TTTCTACAGT GGAGAGACCA TCCTCCCTGC CCCAGGGCTG TCTCCACCCA	180
CCCCCCTTC CCCACCGCA CCCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

CTGATCTGTG AACCTTACAC GAGCAAGGAA TTATCCGGG TTTTGATAC ACCCTACTTA	60
CTAAATGAAG ACTGGGAATA CTATCTCTCT GGGAAGCTAT TTAATAAATC AAAAATGAAG	120
CTCACTTTTG AACAAATTGA CAGTGACTGC AAAAAAATA GAGGCACTTA CGGCACTCTT	180

CACCTGCAGA ACAGCTTCAA TATCAGTGAA CATCTCAACA TTAATGAGCA TACTGGAAGC	240
ATAAGCAGTG AATTGGAAAAG TCTGAAGGTA AATCTTAATA TCTTTCTGTT GGGTGCAGCA	300
GGAAGAAAAA ACCTTCAGGA TTTTGCTGCT TGTGGAATAG ACAGAATGAA TTATGACAGC	360
TACTTGGCTC AGACTGGTAA ATCCCCGCT CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATCGGCC TTCATGGCCT AGATGGGGGC TAGTTTTTGT CATGTGAGAA GAAGCAGGCC	60
GGATGTCAGA GGGGTGCCTT GGGTAACCTC TGGGACTCAG AAGTGAAAGG GGGCTATTCC	120
TAGTTTTATT GCTATAGCCA TTATGATTAT TAATGATGAG TATTGATTGG TAGTATTGGT	180
TATGGTTTAT TGTCGGGAGA GTATATTGTT GAAGAGGATA GCTATTAGAA GGATTATGGA	240
TGCGGTTGCT TGCCTGAGGA AATACTTGAT GGCAGCTTCT GTAGCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GTGGTTCTGA AATCACCCTT CCTTTTCACT CCTCTGCCCT GACTTCCTCT CTCACCATGC	60
TCTCCTGCTC TCCACCTTCA CCCTCTTCAG TGGGATTCTT GCATTTCAGC CAGAGGGACC	120
TGCTGTCAGC TACCAGATGC TCCCCACCCT GGGAGAGCTC AGCGGCATGT CTGCACATGG	180
GCCTTTTCAG CCTTCTTCAT CCGCAATTG GAAGTGAATT TCCCACTCCC ATCTCACACT	240
TGAGAATCTC TGTTTCTTGT TTCTTGTTTT TTATTTTATT TTTATTTTTT CTCCCCCTCG	300
GCGGACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GGANCAGAGT CCAANAGATN AATTATATTC AGAAAACCTCT GTTCAAGATA GGGTATGATT	60
ACAAATTGGA ACAGATCAAA AAGGGATATG ATGCACCTCT TTGCAATCTG TTAGTGTTTA	120
AAAAGGTCAA GGCCCTGCTG GGAGGGAATG TCCGCATGAT GCTGTCTGGA GGGGCCCCGC	180
TATCTCCTCA GACACACCGA TTCATGAATG TCTGCTTCTG CTGCCCAATT GGCCAGGGTT	240
ATGGACTGAC AGAATCATGT GGTGCTGGGA CAGTTACTGA AGTAACTGAC TATACTACTG	300

GCAGAGTTGG AGCACCTCTT ATTTGCTGTG AAATTAAGCT AAAAGACTGG CAAGAAGGCG 360
GTTNTACAAT TAATGACAAG CCAAACCTCGA G 391

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GGGGAAGAAA GCGTAAGGA TGGTGAAGCT GAACAGTAAC CCCAGCGAGA AGGGAACCAA 60
GCCGCCTTCA GTTGAGGATG GCTTCCAGAC CGTCCCTCTC ATCACTCCCT TGGAGGTAA 120
TCACTTACAG CTGCCTGCTC CAGAAAAGGT GATTGTGAAG ACAAGAACGG AATATCAGCC 180
GGAACAGAAG AACAAAGGGA AGTTCCGGGT GCCGAAAATC GCTGAATTTA CGGTCACCAT 240
CCTTGTGAGC CTGGCCCTAG CTTTCCTTGC GTGCATCGTG TTCCTGGTGG TTTACAAAAGC 300
CTTCACCTAT GATCACAGCT GCCCAGAGGG ATTCGTCTAT AAGCACAAAC GCTGTATCCC 360
AGCCTCCCTG GATGCTTACT ACTCCTCCA GGACCCCAAT CCCAGAAGCC TCGAG 415

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GCCAGACTAC CACAAGCCCC ACCCACACTA TGCCAAGCCC TACCCATACC ACAGCAAGCC 60
CCACTCATAC TTCCACAAGC CCCACCCATA CCCCCACAAG TCCCACCCAC AAAACCAGTA 120
TGTCACCTCC CACCACTACA AGTCCTACCC CCAGTGGTAT GGGCCTAGTC CAGACTGCCA 180
CAAGTCCCAC CCATCCTACC ACAAGCCCCA CCCATCCCAC CACAAGCCCC ATCCTTATAA 240
ATGTAAGCCC TTCCACTTCT CTAGAACTTG CTACCCTCTC CAGCCCCTCC AAACACTCAG 300
ACCCACCCCT CCCAGGCACT GACTCCCTTC CCTGTAGTCC CCCAGTCTCC AATTCCTACA 360
CTCAGGCAGA CCCTATGGCC CCCAGAATC CCCACCCAAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCGGCC TTCATGGCCT ACGCCGCCGC CACAATGGGC CGCGGAGTTT GGGAAATCTGA 60
CGCGGATGCG GCATGTGATC AGCTACAGCT TGTCAACGTT CGAGCAGCGC GCCTATCCGC 120
ACGTCTTCAC TAAAGGAATC CCCAATGTTT TCGGCCGCAT TCGGGAGTCT TTCTTTCGCG 180
TGGTGCCGCA GTTTGTAGTG TTTTATCTTA TCTACACATG GGGGACTGAA GAGTTCGAGA 240

GATCCAAGAG GAAGAATCCC GCTGACCATT GAATTCTAGA CCTGCCTCGA G

291

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCT TCATGGCCTA TGGATTACCT GAGGAAGAAG AGATCAAGGA AAAAAACCC	60
ACCAGTCAAG GAAAGTCAAG TAGCAAGAAG GAAATGTCTA AAAGAGATGG CAAGGAGAAA	120
AAAGACAGAG GAGTGACGAG GTTTCAGGAA AATGCCAGTG AAGGGAAGGC CCCTGCAGAA	180
GACGTCTTTA AGAAGCCCCCT GCCTCCTACT GTGAAGAAGG AAGAGAGTCC CCCTCCACCT	240
AAAGTGGTAA ACCCACTGAT CGGCCTCTTG GGTGAATATG GAGGAGACAG TGACTATGAG	300
GAGGAAGAAG AGGAGGAACA GACCCCTCCC CCACAGCCCC GGCAGCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GCTCGAGTCG GATCCTCCCT GAATGTGGAG CGATGGGGGG TTGCACACAG GCCGTTCTGC	60
CCCAGCAGCT AACAGAAAG ACCCTTGCAT TCCTCCCTGC ATCTCTCCCT TTTGGGTCCT	120
ACTAATGTCT GTTGAATTTT TCTTTTTTCC AAAGCAAAAT CCTTCTCTGC ATTTTGTCTG	180
CTTGTCTGTT TCCCAGAGCC GCAGGACTCT CTCCTTGTCT GGAGTTCAG AGAGCCCCCA	240
CTTTCTCTTT CTAAGCTGTG TTGTGTGTTT CCTGGTACAT TCTAGGTTCC CCAAAGATAA	300
ACATGACTAA GGATTGAAA GGAGGAAAGG CCGCGCAGAT TGTTAATCTG AAAGTCAATC	360
CCCGGATTTA GCTCTCAAAA ATGCTTTATT TTTGGAGAAA AGCAATAGAG TAAGACAGAA	420
GGACTTAACG CTTGCAGGGA AGTGGCTTTC TGCCATGTAG AGCCAGGCTG GCAACCTGCC	480
CTCTGCCATC AGGGAGTGAG CATGAACCTG GAAACCTCTA GGACGCAAGA GCGAGGCTGG	540
CTGTCCCCTC GTGTGCAGTG CTTAGACCTT CTGGCCACAC ATCCCATCCC CTCGAG	596

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC TTCATGGCCT ACTTGGTTTT GCTGACCAAC AAATATGCAT AGTGTCTATT	60
CACAGTTATA CAGTAATAGG TTAGAACAGA AATAAATGCC AGCTTCTTAT GATGCCTTTG	120
CCAACAATCA GGCCATGTGT TTCAGGACCC TTCCTTCCTC TGACTTGTGT AGCATTACAC	180

CTCAGCACAC GACTTCTTGA AAGAGTGAAC CTCCAGGGCT TGCTCTCTCA GATGCACCTG	240
GGCAGCAGCA GGAAGTGTCT GACAGTCTCT CCTGTCTCCA TAAAGTAGCG GGCTGGCTCT	300
TTGCTGGGAG TGATGGGAGC CACAGATACG TGCATGGAAG TTAAGTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC TTCATGGCCT AATTATTAAG TAAAATAAGG GTTCCTTGAA TATAGGCACT	60
GCAAATACCA TGACAGTGAT CTGATCACTG AGCTAACTAC TGAGTGACTC AGAGGCAGGT	120
GATGTATACT GTGTGGAGTG GAATGGTGAG AGATTTTCATC AACTACTCA GAATTGCATG	180
AACTTAAAG CTTATAAATT GTTTAATTCT GGAATTTTC ACTTAATATT TTCTGACTGA	240
GATTGCCAC GGGTAAGTGA AACTGTGGAA ACGGAACTG CAGATAATGG CGGACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GCGATTGAAT TCTAGACCTG CTCGATCTCA TGGGGCAGAT GAAATCTCT TCCTTAGAGG	60
AAAGGGAAAG GTGAGGCCCC AGAGGACTTA TCTCAGCTGT ACATGCTCTG CCTGTGGAGA	120
CATGGCTTTT CTTGTGCTG TGGCAGACTG GGGCTTTGGA AGTGGTGAT GTTTAACTTA	180
CCTGAGAGTG AGAGATGTGT AGGAAGAATA GCTGGAAGAA AGTGAAAGAT GAGTGCCAGT	240
ACTTTTGCC TGTATCCAG TAGAGAGAAA GTGACAGTGA AAGTAACGTG AGAGAGAAAG	300
AGTGTGTGTG TATATGTGAG AGAGAGAAAG AAAGAGAAAG GAATGCTTGA TTGCTTGTG	360
TTCACTGGGC CAGCTCTGAA ATCCAAAATC ATGCCTTGAT AACATTACAA AACCGTGATC	420
CTGGGTTTGA GTGAATCCTA GAGACATTGT TCTTATGGCC GCCTGGTTTC CGCAGCATGA	480
TCACCCCTCGA G	491

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GCTTTTCCAT GAAAGGTGGA TCGAGATCTA CTGCCAGTGG GTCAACAGGT TCTAAATTGA	60
AATCAGATGA GTTACAGACC ATCAAGAAAG AATTAACCCA GATCAAACT AAAATTGACT	120
CCTTGCTAGG GCGCCTGGAG AAGATTGAGA AACAGCAGAA GCGGGAGGCA GAAGCTCAGA	180

AGAAGCAATT GGAAGAGAGT CTAGTGCTGA TCCAAGAGGA ATGTGTGTCA GAGATTGCAG 240
 ATCACTCTAC AGAGGAGCCT GCTGAAGGAG GGCCAGATGC CGATGGAGAA GAGATGACAG 300
 ATGGGATAGA GGTGGACTC GAG 323

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GGTCACAATC TCCTTGCACT CCAGGACTGG GCATACTCAT ATGCCTTCTG TGGTTGGCGT 60
 CCTTGTATTT ACCCAGTTTT GGTTCGGTT TCCTCTTTCA CACTTCCTGT CATTGGCTTA 120
 TACCCCTACC TGTGTCATTG GCCTTAACAA GGACTTAAAG ATGCCGAAAG TTCAGTATAA 180
 ATCGAACTGT AAACCATCCA CATTTGCATA TCCTGCCCCCT CTGGAAGTAC CAAAAGAAAA 240
 AGAAAAGGAA AAGGTTTCTA CTGCTGTATT ATCTATAACT GCCAAGGCTA AAAAGAAGGA 300
 AAAAGAAAAG GAACTCGAG 319

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GCGGGCATGG TGTGTAGCCT ATGGGTGCTG CTCCTGGTGT CTTCACTTCT GGCTCTGGAA 60
 GAGGTATTGC TGGACACCAC CGGAGAGACA TCTGAGATTG GCTGGCTCAC CTACCCACCA 120
 GGGGGGTGGG ACGAGGTGAG TGTTCGGAC GACCAGCGAC GCCTGACTCG GACCTTTGAG 180
 GCATGTCATG TGGCAGGGGC CCCTCCAGGC ACCGGGCAGG ACAATTGGTT GCAGACACAC 240
 TTTGTGGAGC GGCGCGGGGC CCAGAGGGCG CACATTCGAC TCCACTTCTC TGTGCGGGCA 300
 TGCTCCAGCC TGGGTGTGAG CGGCGGCACC TGCCGGGAGA CCTTCACCCT TTACTACCGT 360
 CAGGCTGAGG AGCCCGACAG CCCTGACAGC GTTTCCTCCT GGCACCTCAA ACGCTGGACC 420
 AAGGTGGACA CAATTGCAGC AAGACTCGAG 450

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CTTTTTGGAA GAGAATGCTT TTCACCTGTT 60
 CTTTTTTTAA TCCACCTGGC ACTTTCCTCA GGACCCAAAC TTGTTCACTC TGCTGCTTCT 120
 TGATGTATCA ATTTTGGGAC ATCACCTGTT GTCTCCTTGC TGTGAATGAT GAGGATTTGG 180

CCCATATTAC CCCCGTTCCT TCCCCGGTCA TTCTCTCGGT TGCCTTTGTC ACTTTAAATC 240
 ATTTACATAA ACCACAACCT CTCGAG 266

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGCCTA AGAAACTTAT TCGTCTTCAG CATGAGAATA AGATGTTAAA 60
 GCTTAACCAA GAAGGTTTCGG ACAATGAAAA AATAGCCTTA TTGCAGAGCC TTCTAGATGA 120
 TGCAAATCTA CGCAAGAATG AACTGGAGAC AGAGAATAGG CTGGTGAATC AAAGACTTCT 180
 GGAAGTACAG TCACAAGTTG AAGAATTACA AAAATCTTTA CAGGATCAAG GCTCAAAAGC 240
 AGAAGATGCT ATTTCAATCC TTCTAAAAAA GAAGCTTGAA GAACATCTAG AGAAGCTGCA 300
 TGAGGCCAAT AATGAACTAC AGAAGAAGAG AGCCATTATT GAAGATCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGCCTT ACAAAGCCA CCAGGTGAAT AAATGCCATT TTCTTTTTCG 60
 CTAGACATTG TTCATTACT GAAAATGAAC AAGGTAATGC TCAGCATACA AAAAAAAT 120
 AAAGTTCTCA AGATCCCATG CTTTCTGGAT TCCTCTGTAT TTATCACTCA AGTCATCCCC 180
 CTTTTGTGTA TCTCGCTTTT TGTCTCGCT TTATTAAAT CCTTTATATC ACTACCCCA 240
 TCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGCCTT ACAGGAAATA GGCAAAAATA CCCAGGAAAA GGAAACAGTT 60
 TTATGCATTA GTGCTGTACC TTCTTCATAT TGTCAAAAT AAAAGATAGT AGAGATTTAT 120
 TGAAAACATT TTAAATAAAG AAGTTGTGTT CATAATATAA AGCTGCCTTA AACTATATAT 180
 GAAAAAACT GTAAATCATA GAAATAAAT TTATCAAAGA TGTTAAATAA TACATTTTAC 240
 AGAATAATTT CCCATGGGCT TCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

GAATTCGGCC	TTCATGGCCT	AGCCATCTTA	TTTGAACAT	ATTTTTCCTT	CAAAGAAGCA	60
ATAGGTCTCA	ACATAGTGTA	GGTAGCATCA	GGTGACAGAA	AGCCAATTTT	ATTTTCAAAT	120
TTAAGTTAAT	TATCTTCGTG	ATCCTATTTA	TCCACAATTT	CTTTCAGAAA	AGACTGAAAA	180
AACACATTAT	ATTCAGGAGA	TATAATGAAA	TTATTGGAAG	GCATCACTCG	AG	232

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	AGACCTGCCT	CGAGCCCCTA	AAAATATCCT	60
AAATGCATT	CCTCCTCTGC	ATTCTAACTA	CTGCTGCCCT	TGTTCTAGGA	CTCCACTCTC	120
CCACATCAAC	CAACTTTTCT	CCTTGGCCCC	CTC			153

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

GCGAGGGCCA	GGGAGGGAGG	AAGCAATAAA	TAGGGGGAGA	AAATGGCAAT	AAGACGTTAT	60
ATAGCCCTTC	TAACAAAAAT	ACCAGAAGGG	AGGGGTGAGG	GACAAGGCTG	TCTGAGGGAG	120
GGCAGGAGGT	GAGGCCATGG	CTTGGTCTCT	TTTGGCCTTG	GATGGCCGTC	AGCTCAGCAT	180
GAGGCATCTG	AAAGAACTAC	CCAGATTGCA	GAAGAGAGAG	GTCCCAGCCT	CCTTGGAAGG	240
ACATGATGGG	GGAGGAGTGG	AGACAACAGC	TGAGTGTTAC	CTGTAAACT	CGAG	294

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

```

GAATTCGGCC TTCATGGCCT ACACACATAC CCAACACACA CACAGACACA CACATACACA      60
GAATCAACAC TCAACACGCA AACACCCAAC ACACACATGC ACACACACTT TCTGAAGATG      120
AGTTTCTCA TTTATGAAAT GAGCTCATCT GGACTTGCCA TGAGGGTCCA ACAGGTGCCA      180
TGCAATCAGG TGTGCACTCA GTATGGGCTG GGTGGAGATG GCCATCTCCT TTCCCGTCCA      240
GGCCTGGTTC CTGTGTGCTG GGCCTCTGCT CTTCCCCCCC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GACAAGCTGA GAAAATGAAA GGAAACTAG AAGAATTGTC TAATCAGTTA CATCGCAGTC      60
AAGAGGAGGA AGGAACACAA AGAAAGGCCT TGAAGCCCA AAATGAAATA CATACCAAAG      120
AGAAGGAGAA GCTGATTGAT AAGATTCAAG AAATGCAGGA GGCCAGTGAC CACTTGAAGA      180
AACAATTTGA AACTGAAAGT GAAGTCAAGT GTAACCTCCG GCAGGAAGCA TCCCGGCTCA      240
CTTGGAATAA CAGGGAATC GAG                      263

```

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTCCTACA AATTTAATTT TTTTATGAAA TTTTAGGTG      60
ACTTGTAAT TCTTCATGTA TGAGGAGTTG TGTTTATTAA TGCTACTTTT TAAATTTTCC      120
TGTGCCATGT GGCAGATGTT TATTCTCTTA ATGCACTTCA GGTTTGCTAT CTGTAAAGCC      180
TTTGACCCAG GCCTACTGAG TCAAATCTAC ATTCAAGTGA ACATTAAAGG CAGAAACCTC      240
GAG                      243

```

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

AATTCGGCCT TCATGGCCTA ATTGAATTCT AGACCTGCCT CGAGATTACA GCCAGAGTCT      60
CCTAACTGCT CTCCATCTAT TCTCTAATCC CAATAGCTAC TCTCCATGCA GCTGTCAGAG      120

```

TGGGCCTTAT AAAACATTGG TCAGGTCATG CCAGGCCTCC GATGGCTCCC ATCACACTCA 180
 GGGTAAGAGC CGAAGCCCCA TGTGGGTGTC TAAGGCCCGG TGTGATCCTT ACCCACTTCT 240
 CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTACAC CTGCCTCGAG TACTCCCATG CCACTTTCAG CACAAATATC ACTTATTATG 60
 TGCTGCTGA ATATTATTTT CTTTATTTCT AAGTTTGGTC CATTCACTCT CGAG 114

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTGTTGT TCTTTTCTTT TCCATGATAT CATTATATGG ACAGTTTAGG GTGGTCTCAT 60
 GGATTATAAC CATTGGGATA TTGGTTCAC TAACAATTTT CTTACTGGCC AGAGTTCTTG 120
 GTGGAGAAGT TGCATATGGC CAAGTCCTTG GAGTTATAGG ATATTCATTA CTTCTCTCA 180
 TTGTAATAGC CCCTGTACTT TTGGTGGTTG GATCATTGA AGTGGTGTCT ACACTTATAA 240
 AACTGTTTGG TGTGTTTGG GCTGCCTACA GTGCTGCTTC ATTGTTAGTG GGAGATCTCG 300
 AG 302

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGTC TTCATGGCCT ACCTGAGCAC TCTGCATTTT AATTCTGTGT TCTTCCCTT 60
 TATCTATGTG TTGTCTCTGA GGAAATGTCC TTTAATGTCT TCCTCAGGCT TGATACCTAA 120
 TTTGAGATGG TTCAAACAAT TTTTCCCTT TCCCTTCACT GGAAGCTTTG TTACTCATTC 180
 TGTTTGCTTT CATACTTCA AATGCTGTCT TTTTATTTT GGTGGTATTT TTTTCTCTT 240
 TCTCAGGTGT AACATACCTC GG 262

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

GAATTCGGCC	TTCATGGCCT	ACCTACTAGG	CATGTTTTAT	GACACAGATG	ATGCGAGTTT	60
CAAGTGGTTT	GATAATTCAA	ATATGACATT	TGATAAGTGG	ACAGACCAAG	ATGATGATGA	120
GGATTTAGTT	GACACCTGTG	CTTTTCTGCA	CATCAAGACA	GGTGAATGGA	AAAAAGGAAA	180
TTGTGAAGTT	TCTTCTGTGG	AAGGAACACT	ATGCAAAACA	GCTATCCCAT	ACAAAAGGAA	240
ATATTTATCA	GATAACCACA	TTTAAATATC	AGCATTGGTG	ATTGCTAGCA	CGGTAATTTT	300
GACAGTTTTG	GGAGCAATCA	TTTGGTTCCT	GTACAAAAAA	CATTCTGATT	CTCGTTTCAC	360
CACAGTTTTT	TCAACCGCAA	CCCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

GAATTCGGCC	TTCATGGCCT	ACTTTTTAGT	AAAGAGCAAA	CTCATAAATT	TTGGCATCAG	60
AGTTTGAGCT	TTATTTTCT	TAAATGAGTT	TGAAATCAAT	TTAATATTTT	TCTCCAATTC	120
CCTAATGTCT	CAGAAGTGAA	TTACAGTAT	ACCTTTGTTT	TTTCGTATTC	TTAAGTAGTA	180
TTTGGATTTT	ATTTAGTAGT	TGCAGTACTA	AATAAGGAGT	GGGGAGTTAA	TTACAAAACG	240
AATCAGGTGA	CTCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 85 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTGA	TTTGGCCTGC	ATGGTTTTCC	TCCTACCCCT	60
TTTCTTTTGC	CTGGGTCAGC	TCGAG				85

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

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GCGATTGAAT TCTAGACCTG CCTCGAGGGG TTTGGAGCTC TGTGGGTGG TGACCTCAGT      60
CCTGTTTACC CCTGCAGAAG AAGGACCCAG CCCAGTTCCT GCAGGTACAT GGCCGAGCTT      120
GCAAGGTGCA CCTGGATTCT GCAGTCGCCC TGGCCGCTGA GAGCCCTGTT AATATGATGC      180
CCTGGCAGGG GGACACCAAC AACATGATTG ACCGATTCTGA TGTCCGTGCT TAGGCCATGA      240
AGGTCGAG                                     253

```

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

```

GAATTCGGCC TTCATGGCCT AGTCACTTAA ATAGATTGG TGTGAAATTT TATGATAAAA      60
GGTGACTTTT GTTCTAGTAA GTATTCTCAA AGAAAAGAGA GTGAGTAGCT ATTTTGGGAT      120
GAAGATAGTT ATAAGTAGA TAGCGTTTT TGTTTTGTG TTTTGTGTTT GGCCCGAGGC      180
GAGTGCTGTG GTGCGGTCAT GGCTCACTGT AACCTCAGCC TGGGGTCAAG GTCTGCCCAT      240
CTCAACCCTC GAG                                     253

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(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

```

GAATTCGGCC TTCATGGCCT AGTTCAAAAA TAAAGCAAAT ATTTATTTTG GTATTGTTTT      60
GAGCACAGCT GATTTTAAAC ATTTTCTTTC ATAACACTCA GAAATCATTG ACAATTGTTT      120
GCTCATTGGG TATGGGTTTT TGTTCTCTT TTTTCTTTTG GGTTCTTTTA GGTGCTTTCT      180
TTTAACATTG GTCATGTTTC ACCCTTTTTT TTTTCATCCC CCCAGTCTCG AG          232

```

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

```

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA      60
GAGCTTAGTG TATACAGATG AGGGTGTCGG CTGCTGCTTT CTTTCGGAAT CCAAGTCTTC      120
CACAGAGATT AGCCTGTAGC TTATATTGA CATTCTTCAC TGTCTGTTGT TTACCTACCG      180

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TAGCTTTTTA CCGTTCACTT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC 240
TGGACTTTCT CCAAAGGCAC TGGACCCTCG AG 272

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC TTCAGGGCCT AGATTAAATC TCAAGGTGGA CTAGGAGAGA ACAAGCAGAC 60
TTCTATAGAA CAGTGTCTTC CTTTGGTGTT GTTTACGATC AAGAAAAGAA AACCTTTGAC 120
TGGACACAGT TCCGCATCAT TTCCCGTTTG GACAAGAAGT CGGATGAGAG CCTGGAACAG 180
TATTTTATA GTTTTGTGGC CATGTGCCGG AATGTCTGTC GTCTACCAC ATGGAAGAT 240
GGCGGTCCCC CAGATACCAC CATCTACGTT GAACCCATTA CTCGAG 286

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GAATTCGGCC TTCATGGCCT AGTGAATCT TATTGGGAAC CTAAACTGC TCTTAAAGTC 60
TTTTTGAAAA CTCAGACATA TTTTGGCAT TACCTTTTTT TTATTGGAAA GGAAAAATGA 120
AAACCTTTCA TTTTATTAAT AATCTATAT TCCACTCCTG TATTTTCTTC TCTTGGATGA 180
TGATGGTGAT ATTATTTCTC ACTTTTCAA ATAATACCCT GGGACTCGAG 230

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GATTTCGGCCT TCATGGCCTA GGGAAAATAA AAATGTATTC AGTAGCACGT GGGTTATGGT 60
TTCTCATAGA CCAGGGGATA AGATTAAAAG TCACTGAAGA GTGGGAAAAT GCATGTTGAG 120
AAGATGAGAA TGGCCTGTAT TTTCTCCAGG GGAATCTGTG TAATGTGCCT TTTCCCTCTC 180
CAAATGCCTA GAACCATGGC ACTGTGTCTT ATTTATTTAA CCGTTGGGCC GTCTCGAG 238

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

TAATTCATCT AAGTTGTTGA ATTAGCATAA AGTTTTTAAT AAAATTTTAT GTAATTCCTT	60
TTTAGAGAAC TAACTTTTGA AATTGCTGAT TTTCTGTTT CCGTTTCAAC ATTTTACACA	120
CTGGTAGTTA ATAGTTTTT CTCTCCAGCT TACTTCGTGT TTGATTACT TTTCCTTTC	180
TGTCCTCTTG AGGTGGAAGC TTAGAGGATT AATGATTCCA TTTCTTTCTA ACGAAATCAC	240
TTAAACTAT AAATTCACT CCAACTACTT CTTTAGCTAA ATTCCATAAA TTTTACTATG	300
TTGTGTTTCC CTTTTCACT CCGTCTCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCTAGA CCTGCCATTG TGGGGAGTGG AAGTGGCATG ACCTCAGGAG CCAGTTCTGA	60
GTCCAGGTGA ACCAAAGCTC AGTTTCTTTC ATCTTTGAAC CTGAACCTCT TACCTCCAAG	120
AAAAAGGGCC CAGGAATTTG GGCCTTCTTG TTTATTGTG CTTCTGCCCC TCTCCCTATC	180
TAACCCCTGG GTAAGGGTGA GCTTGAAGGT GATGGTGACA GTGGCTTCTG TGTGTGTCAG	240
TCCACCTCC AAGCAATGCT TAGAAACCAG TCCATAAGCC AATTAAACACA TCATTTTATG	300
GGCAGATTG CAAGTTCTCA GTTGTTTACA TGTTTCGTTA AGTACTAACC TCCAAATTAA	360
TAAAGCATGA CACATGACAT CACACATTTT ACAATTGTGA CCCAAGCAAA GTTCATGGAG	420
GTACTCGAG	429

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GCTTGGTAGA CCACATCCAA GGGACGATGA GGTTCCTCCAG AGGAGGAGTG GTCACCATGA	60
TCGAG	65

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```
GAATTCGGCC AAAGAGGCCT AAATTTGGTT TAATGTGTCA TCAAACCTTG TATTCAGCTA    60
TCTAGAGCCA TTTTCTGGAT TCATGCAATA CATTTTCCCC AAACCTTTT TATTTTGAAA    120
AAGCTCAAAC ACAGAAAAGT TGAAAGAATA GCGTAAAGAA CATCTGGATG TGGTGCAGGG    180
TCTCATGTTC ATAATCCCAG CACTTCGGAA GSATTATTTC AGACCAACCT GGGCAACATA    240
GTAAGACCCA ATGTCTACAA AAATGTTTAC GGATAAACCA GCGTGGTGG TGAGGTAGTC    300
CCAGCTACTC AGGAGGCTGA GGTGGGAGGA TTGCTTGAGC CCAGGAGTTC AAGGCTGTAG    360
TGAGCAATAA TCACATCACT GCATTCCAGC CTTGAGTAAC AGTGAGACCT GTCTCAAAAA    420
AAAAAAAAAA AACACCAAAA ACAACCAACT GTGTATATCT TGCACTGATA ATCCCCCGAA    480
TTCTAGACCT GCCTCGAG                                         498
```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```
GAATTCGGCC AAAGAGGCCT AAGCTGAGAT GGGTGTTAAA AGTTAAGACA CAGCTTAAGA    60
CAGAAGCATT GTAAAACAGG AACAAATACT GGCTTAAACC TGATGTCTCT AACTATATTC    120
CTCTATTTTA AGAATGTTTT AGTATCTGAT AGTTTCATCA GCCTTTCCAT TTTCCAATAT    180
GTGACCTTTA TTCCACCAT GTCCCAAATA AACGAGTCCT AGGATTTTCT AGAAGGTGGA    240
CCTCAATTAT TGTGTCCCTT TTATATATAA GGCAACATT GCTTTTAAGT TCTGTTGGAA    300
CATGGGAAC TTTACTAGAA TGCTTAGAAT GTTCAGAAAA AATGTCCCAA AGCTCTCTTC    360
TGGTCCATAC AAGACAATCA GAATGTAACA CAGTAGCAGA GGGTGTGGAA CATACACTAG    420
TCATATTTGA TTCTCTCTGT CAG                                         443
```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```
GAATTCGGCT AAAGAGGCCT ACTTCTGGCT ATTTTCAAAT ATATAATATG TTATTGTTAA    60
CTATACTC                                         68
```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

GAATTCGGCC	AAAGAGGCCG	GAATTTGGCC	CTCGAAGCCA	AGAATTCGGC	ACGAGGGCAA	60
GACTCTGTCT	CCAAAAAAA	AAAAATTAA	AAAAAAA	ATTTTTTAA	AAATTTTANT	120
TAANGTAAAT	TAAAAATGT	TCAGTGAAAT	GGTAAAAA	AAAAAAGAC	GCACAAAATA	180
CCTTCATGTT	TCTCATCTCT	TTTCCCTTC	AGATTCTGCC	TTTCTTCAA	TTCAGCTCTT	240
CTTTCCAGT	CTTCAACCA	ACCACCACGA	CTCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

CTCGAGGACC	AAGGATGAAG	AGCATAAGAA	GATGAAGATT	GTAACTTGT	ATAAAATTAT	60
CTTGGTGAGA	AGACAAATTG	TAAAGTAGAT	ATTTGTATC	TTTTACCACT	TGGGGTTGC	120
TTTTTTCCCG	GAATTCATCA	GAACTTTGAA	TTTTTTTTT	AAATGGGCTG	TTTTTAATGC	180
AGGGGCTTTT	CTTCCCTAGA	AACCCAATTC	TAAGCAGAAA	AAGNAAAAAN	ACACCAAAAA	240
TAAAAAACC	CCCTCGTGCC	GAATTNTNGG	CTTCGGGGGC	CAAATTCGG	CCTCTTTGGC	300
CGAATTC						307

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

GAATTCGGCC	AAAGAGGCCG	GAATTTGGCC	CTCGAAGCCA	AGAATTCGGC	ACGAGGGCAG	60
TTAAGATCTG	GGTGATTCTT	TAGGGAAACG	GCTGGTTGAG	AGGCTTTGAT	GGAATCCCAT	120
TCTCTGCTGT	GGCCAGAAGG	TGGTGCTAGA	GGCCAGTCCC	ACTTGGATGT	GACCTGGCC	180
TCTGCCAGGA	TTCAAACCAC	AAAGAACATT	TGGAAGTGGG	ATGTTTGCTT	TGAAGCAGCC	240
TGAAAAAAG	TGAAAAGGAA	ACCAAGATAA	CTCTCTCTCC	CTCCGCTGGC	AAGGATCAAA	300
AATACCTTGT	GCAGGGAAGC	CCGAGCCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

GAATTCGGCC	AAAGAGGCCG	GAATTCGGCC	TCGAAGCCAA	GAATTCGGCA	CGAGGCCTCG	60
TGCCGCGCCG	TTTTTTTTTT	TTTTTTCAC	AGGGGGGCAG	TCGGGATTAT	AATACACTGT	120
AGCAGTTGGC	TGGGGAAAAG	TCTATCAAAT	TCCATGACCA	ATTGGACTTT	TCTCCACCT	180
GTAATATAAA	TAAAATATGT	ACTGTTTCAT	ACTGAATTTT	TTCAATGCAT	TGGGGTCAA	240
CATAAAGGC	ACAAATAAAT	AAAAATATCA	TTAAATAAAC	GGAAATTACA	ATTTCAAGTT	300
TCATGTGGAG	TTGTATCTCA	CTGTTTGGTT	ACTTTTCCA	ATTTAATTTG	ACAGACTTAG	360
TAATAGCACA	CAACTGTCCT	ACCCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

GAATTCGGCT	AAAGGGTCTA	CGAGGTCAGC	AAGGACGCCC	AAGGAGACTC	AGTCATGAAA	60
GGTGAAGTGC	TCCTGTTTTC	CAGTGTGATT	GTCCTGCTCC	AGGTGGTATG	CAGCTGCCCC	120
GACAAGTGTT	ACTGTCAGTC	ATCTACAAAT	TTGTAGACT	GCAGCCAGCA	GGGTCTGGCC	180
GAAATCCCTT	CCCATTCCCC	TCCGTCGCTC	GAG			213

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 173 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

GAATTCGGCC	TTTCATGGCCT	AGCGATTCCA	GGTTTTAAAT	AGTTTGTAAG	TTTTCAGTTT	60
CTACACACTT	TATCATCCAC	TCGTGATTTT	TTAATTAAAG	CGTTTTAATT	CCTTCTCTG	120
TTTCAGCTGT	GATGCTGAGA	TCCATATTTA	GTTTTATAAG	CTTCCCCCTC	GAG	173

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GGTCATACTC	TCTCATCCAG	ACTGGAGTGC	ATGGAGTGCA	GTGGCACCAT	CTCGGCTCAC	60
TGCAACCCCT	GCCTCCCAGG	TTTAAGCAAT	TCCCCTGCCT	CAGCCTCCCC	AGTAGCTGAG	120
ATTACAGGCA	CATGCCACCA	TGCCTGGCTA	ATTTTGTAT	TTTAGTAGA	GACGGGGTTT	180
CACCATGTTG	GCCAGGCTGG	TCTCGAATC	CTGACCTCAA	GTGATCTGCT	CACCTCAGCC	240
TCCCAAAGTG	CTGGGATCAC	AGGTGTGAGC	CACTGCACCC	GGCCTAGTTT	CCATTTTCT	300
GTTGATATTT	ACTTCTATTC	ACTCATTAAG	ACTATATTTT	ATTTCTTTAA	TATATTTTCC	360

CTTAGTTCTT TGAACATATT TATAAGAGCT ATTTTAAAGT ATTTGTCAGT TGAATCTAAC 420
 ATCTTTTGGG GCCATTTTCT ATTGACTGCT TTTTCTTGA TGATGAGTCG CATTTTCCTT 480
 TTTGCCTATC TAGTAATTTT TAAATTATAT ACTGTACCTT GTGGATGTAT GGTAGAGACT 540
 CTGGGGTCTC TCGAG 555

(2) INFORMATION FOR SEQ ID NO:1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTCATGGCCT AGAATGTTAG AAGGTGCCTG CCGAGGCGGG ACAGAGTGT 60
 CGCTCGCGCT GGAGAAGGCT CTGCTCAGCC CTGAGAGTCC CTTCTGCCC CACCGATACT 120
 GGCACTTTAA CAAGGAAGCT GACCGCACAG TGTCCAGACG AATTGGCCCC CAGAAGATGG 180
 GGAGTTCTGT CCTGCCCTTC TGTGTCTGCG TGACCTCACC CAGCCTAGGA GGGAGGTGCA 240
 TTCAGGGTAG ATTTGCCTCT CATTCAAAGT TCTGGGGCTT TGGGTGGAAA ACAGCCAGCT 300
 TTGGCGCTGC TGGGGAGACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAATTCGGCC TTCATGGCCT ACTTGATGCT GCAAAGAACA AGATGCGAGT GAAGATCAGC 60
 TATCTAATGA TTGCCCTGAC GGTGGTAGGA TGCATCTTCA TGGTTATTGA GGGCAAGAAG 120
 GCTGCCCAAA GACACGAGAC TTAAACAAGC TTGAACCTAG AAAAGAAAGC TCGTCTGAAA 180
 GAGGAAGCAG CTATGAAGGC CAAACAGAG CAGCTCGAG 219

(2) INFORMATION FOR SEQ ID NO:1060:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGGC CTTATGGCC TAGTATTTAT AGCCAAGGAA ACAGGGCTAT GAGTTTGTAC 60
 TGTAGGCAGC AGTAGGGAGG GGGAATTGGA AGCAGGGGGG AGGGCTCTGC AGTAGTTCAG 120
 TTGATGCATA CATAAGGCCT GAATTAGGGA ATTAGGAGAG TGATCATAGG TGTGGAAAGG 180
 AGGGGAGGGC TTCCAGGCAC ATTTGGTGTA AAATGGATAC AACTTGGTAA CCTGTACATT 240
 GCTACCTTTG CACATTTGGT TTCCCTGTC TCAAAGGCTC CCTCTTCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1061:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

```

GAATTCGGCC TTCATGGCCT AAAGAAAACA AACAAACAAA GAGAAAACCC ATGAGCATT 60
TAATTCGTAC TTTTCTACTT TTCTCCCTAC ATTTAGAATA CTGTGGCACT TTCTGTTATC 120
CAATGTGTC TCAGTCTCCA TATTTAAGGA CTGTGGGTGA AAAGCTTCTA CCTGGAATTG 180
AAGTGCTTTG GACAGGTCCC AAAGTTGTTT CTAAAGAAAT TCCAGTAGAG TCCATCGAAG 240
AGGTTTCTAA GATTATTAAG AGAGCTCCAG TAATCTGGGA TAACATTCAT GCTAATGATT 300
ATGATCAGAA GAGACTGTTT CTGGGCCCGT ACAAAGGAAG ATCCACAGAA CTCATCCAC 360
GGTTAAAGG AGTCCTCACT CTCGAG 386

```

(2) INFORMATION FOR SEQ ID NO:1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

```

GAATTCGGCC TTCATGGCCT ACATGAAGCT GAATTACTCT CATCTTATAT CTCTCTGCAG 60
TGGCATATCC TGATGGTGAT TTCCTCTTTT TGTGCCTCAG TTTCACCCCC TATGGAATGG 120
GGATAAACAC TTGCGGCTGG GCATGGTGGC ATGTGCCTGT AGTCCCAGCA CTTTGGGAGG 180
CTGAAGTGGG AAGATTGCTT GAGGCCAGGA ATTTGAGACC AGCCTGGGCA ACATAGTGAG 240
ACACTCTCTC TACAAAAAAA AAAAAGAAAA AAAAAATCAG ATGTGGTTGG TGCATGCTAC 300
TGAGGCGAAA CTCGAG 316

```

(2) INFORMATION FOR SEQ ID NO:1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCAAGCTTTC TTCCTTCATA CTACATATTT 60
CACAAAATTT GCTCGTCAGG TCTGCAAAAA TACCCTCCGG CTGCGGCAGG CAGCAAGAGC 120
GCCGTTTGTT GCTATTAATT ATGTGCCAT TAGGGCAGAA TGTAAGATGC TTTTAAATTC 180
TTAACCTTAT ATGTTGTGCT TCTGACCAAT TTCTCTTTTC CTCTCTTTCC TTTTCTTTT 240
GTTTGTGTTG.TTGCAATAAA CATAAGTTCT TGTGTACAGC CCACTCGAG 289

```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

GAATTCGGCC	TTCATGGCCT	ACAGAGCTGA	GAAATAATTC	CCTTGTGTGT	TTATAAGTAA	60
GAGTTAAATC	CCTCCCATG	TAATGTAGCA	CCAGATCGAA	GTAACAGAC	TATGATTTC	120
GTGCTAGACA	CAGCCTTAAG	GCAGAAGAAA	TTACACTGTC	ATGCAAAGGA	TATGTAGCTG	180
CTGCTATTTT	GGTGCTTGAA	TTCTTCGTTG	TCACATAGTT	GAAGGCAATC	CAGATGAGGA	240
AGAGTGTTAA	CCAACAAAA	GAGAAAATTC	CCTGCACATG	GTCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

GAATTCGGCT	TTCATGGCCT	ACTGGGAGCT	ATCTTGCTA	CCTTGAGGTT	CCTGAACAAT	60
GAATTCCCAT	TAATGAGCAG	TCTTCAGTAT	TAAAACCACT	GTCTTGTCAC	CTCATTTTGC	120
ATTACTGTCT	TCCGTGGATG	TTTCAGTTAC	AACGTGAATG	TTATTTATAG	AACAACATTA	180
ATCCATTAAA	GCTAACCTAT	TTTTCAATAT	TTATGATAAT	CTATGTACAT	ATATTGTCTG	240
TCCATATGTA	TTGTAAATA	GGTGTATAT	AATGTCAGGT	TTGGGTCTTG	GGTTCAGTG	300
TATATATTCC	TGTAAGTTTC	TTAACTGCAT	TTGATGAAT	TCACATTATG	TAATAATAAG	360
AATTGTCCCA	AAAGTACCTG	TACAGAAAAT	TGAATATTGA	AAAATTGACA	AATTGTGTAC	420
AAACACTAAA	AAAACTTGT	TTAAATTGTA	TTGCAATAA	ACAACATCAA	ATTTTTTCAT	480
GAAATCTGCC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTCGGCC	TTCATGGCCT	AAAGATTATA	AAGGAAAGGG	GGGTAGTTAA	GATTTAGAAT	60
TCAAGTTAAA	TTTCAGAAAT	TGGGGCAGTC	AGGCATTTGT	ATCTTTTAGG	GCAACAAGTA	120
AAACATGTAG	AGTGCTTGCT	ATCCCACTTC	ATAAAGCTTT	TACCCAATCT	TATTTCTAAA	180
CCTCTGTGCA	TTCTTAGTGT	CTTCTCATTC	TGAACAGAA	AATAAGGAAA	AACATTTAAC	240
TTAGTTTTCT	AAAATCAGAT	AATCCTAAAC	AAAAATGTTA	GTCAGGGTCA	CTAAAAAGTA	300
TTGCACATTT	ATATAAATAC	AGTCCTTTTA	AAATTTGACT	TTTAAAAAAC	AAAAGACTTT	360
GTACGATATT	GTGTTTTTAT	TGCGTTTGCA	ATATTTTTAT	AGTAGCCTTT	ATGAACCTAG	420
TATAAGTGCA	AGTTGTTTGA	AAAGGTGTTT	TTATTAGTGC	ACAATAGAAT	TGTGAGGTTT	480
TCAATAGATG	TCATGAGATT	CCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT ACTTATTTTT TTCTTTTAAA CAAATAAGCA CACATTCTTT      60
TTAAATAAAG TTTCTCTTCC CCAACCTAAA AGTAGTAATG CTAGAATTG AGCATAGCAG      120
AAAAATATTT AGGAAAATTA AATCCCAAAC AAGAGAGACC ATCTTGGAAT GTGCTCACTC      180
GGGTGGAAG TCGACCCAGG TGCCTGTGTG CTTGACAGAG GCGTGGCTGC ATCCGCGTAG      240
CTGACCTTCA GATGGACTGG AGTTAGCACA TTGTAGTCA TTTTCCAAC CATTCTTTCG      300
TATCTGAGGT ACGTTTTTGA CCTGTTTGTG TATGTCACTC GCGATCTTGA AGCACACTCT      360
TTCATTTACT TAAATATTTC CTGAGCACTC GAG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GAATTCGGCC TTCATGGCCT AAGGTAATGT GTCAGTGGAT GGAAAAGTTT AGAAAAGATC      60
TGTGTAGGTT CTGGAGCAAC GTTTTCCAG TATTCTTTCA GTTTTGAAC ATCATGGTGG      120
TTGGAATTAC AGGAGCAGCT GTGGTAATAA CCATCTTAAA GGTGTTTTTC CCAGTTTCTG      180
AATACAAAGG AATTCTTCAG TTGGATAAAG TGGACGTCAT ACCTGTGACA GCTATCAACT      240
TATATCCAGA TGGTCCAGAG AAAAGAGCTG AAAACCTTGA TACACTCGAG                290

```

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACTCGACTCA TATTTTATC ATACATTTC AAGTCAGTTG      60
CTGATGTTAA TCCCATTTCA ATGTGGGGCA GACTCTCGGG GTAATTTCAA AAAGATGTCT      120
CAACATGTT TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG      180
TGTGGAGACA GGGTCTCACT CTATTGCCA GGCTGGAGTG CAGTGGTGCC ATCATGGCTC      240
ACTGCAGTCT CGACCTCCA GACTTAAGCA ATCCTTCCA AATAGCTGGG ACTCCAGGGG      300
CACCCCACTA CAACTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT ACTTCTAAAT GGCAACAGT TGTCTGAAG GCACTGTCTT      60
TTTCTACCTA GATGTTGGGT GGAAAAAAGC TGCCTTTTAT ATAGAAGTTC      120
TTGGGAATAT TTCTCATATA GTGAGATGAA CAGAAATGCAA AAGTTTCTT CCTGCAGGAT      180
CTCCCAAAT CCTTCTTGGC TTGAATTTT CTTCTCACTT TTTCTTTTGA AAAGCTTTGT      240
TCCTTTTGCA CCTTGGAATA ATAAGTCTTG TTTGTCCTGA CAGCAGAGTG CAAGCATCTA      300
TTGCATCAAA ATTCCCAAGT GGAATAGAAA ACCAATGGTC CTTTCTGAA TTTCTGTAGC      360
AGTAGCAACA AACATTTCAT TATAACCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT ACACAAATGGG AATCCAAGGA GGGTCTGTCC TGTTCGGGCT      60
GCTGCTCGTC CTGGCTGTCT TCTGCCATTC AGGTCATAGC CTGCAGTGCT ACAACTGTCC      120
TAACCCAAT GCTGACTGCA AAACAGCCGT CAATTGTTCA TCTGATTTTG ATGCGTGTCT      180
CATTACAAA GCTGGGTTAC AAGTGTATAA CAAGTGTGG AAGTTTGAGC ATTGCAATT      240
CAACGACGTC ACAACCCGCT TGAGGGAAAA TGAGCTAACG TACTACTGCT GCAAGAAGGA      300
CCTGTGTAAC TTAAACGAAC AGCTTGAAAA TGGTGGGACA TCCTTATCAG AGAAAACAGT      360
TCTTCTGCTG GTGACTCCAT TTCTGGCAGC AGCCTGGAGC CTTTCATCCCT ATACGCTCGA      420
G                                     421

```

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT AATCGGTCAC TGATAGTATG TATTTCTTTA GTAAGAATGT      60
GTAAATTA CAATGATCTT TAAAAAGAT GATGCAGTTC TGTATTATT GTGCTGTGTC      120
TGGTCCTAAG TGGAGCCAAT TAAACAAGTT TCATATGTAT TTTCCAGTG TTGAATCTCA      180
CACACTGTAC TTGAAATTT TCCTTCCATC CTGAATAACG AATAGAAGAG GCCATATATA      240
TTGCCTCCTT ATCCTTGAGA TTTCACTACC TTTATGTAA AAGTTGTGTA TAATTGTTAA      300
AATCTGTGAA AGAATAAAAA GTGGATCCCC TCGAG                                     335

```

(2) INFORMATION FOR SEQ ID NO:1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```

GAATTCGGCC TTCATGGCCT ACAAAAATAG GCACAGTTTC AGATGCTTCA GCATATGAGG      60
CATGGATACT TCAATCATTT GCAAAGGGTT CTGCTCAGTA GACTGAATGG AAAAGATGGT      120
CATTGCTCTT TAATGTAATT TTGCAGCTCT CATCAAAGAA AATATCTCCA TGAAATTTAT      180
TGGTAACTGT TTATCTTTGA TCAGTGCAAA CTGAAGTCAA ATATACAAGG TAAACACACA      240
TAAAGATAAG TTCACACATT TCTGTGAATT TTCTAAATGT ACACACTTCT GCAAATTCTC      300
TAAATTCACA AATAACAAAT TTGCATGCAT GCAAGCATAT GTGCACATGT GCACACCTCG      360
AG

```

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```

GAATTCGGCC TTCATGGCCT ACCCAGGTGA TCAATGTTTT CAATGCGATC AGTAATAACC      60
ATGTGCTCAT GAATCAGATA GGACTGAGGC AAATAGGTTT CAGCCTTGAT GTTAATAAGT      120
AACTCCAGTA GGTTCCTGGG TGGCATAACA ATGGAAGTGT TCAGAGGGAT CACATAGCAC      180
TTATCCAGGT TAAGATCTAA ATAGGCTGTA AGTTTCTTGT TAAAGTCATG AACAATGTTG      240
GCAGGATCAC TATCTGCAAA CTCTGGGACA GGCACACTGA TAAATTC AAC TTCTTTCTT      300
CAAAGATTTT AATATTTTCT TCAATGTCTT GGTAGAGAGC AGCTGGGGCA TCTGCAGAGG      360
GCTCATTTAA GATGACATCA TCTTTGATGT ACTTTATTCC ACAGTAGTAC ACGTCATCTG      420
GTTGAAGTGC AAAATATTTG TACAAGTATG CTCCTCCTAG AATAACACCT GCAAGCATAA      480
ATGCTAGTCC AAAGCACATG CACCACCACC ACCCGGCTAA TTTTGTACT TTTAGTAGAG      540
ATGAGATTTT ACCCTGTTGG CCAAGATGGT CTTGAACTCC TGACCTCAAG TGATCCGCCC      600
ACACCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```

GAATTCGGCC TTCATGGCCT AAGTTTGTGG TCCTCTGAGA ATTCTCTGAA GGAGGAAATG      60
GGTTGACCTA TTTGGTTGCT ATGAAGTAAA AACAATCTTG TTTTCATTTT TTAGTGAACA      120
TCTGGGTGTC ATTTATTATT TCACATTCTG GAGATTCTGT AAAACCACAA TTTGATAATA      180
TGAGGGTTCA TCAAAGCGGT AATTATTGAG CTATTTTAT AGTTGATTCA AGAATTAGGG      240
TGGCGACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

GAATTCTAGA CCTGCCTCGA GTGTGATACC AGCAGCTATG AAGCAAACCTG TATTAACCAA	60
GTCTTTTATT TTCTGTGTTT TGATGCATGA CTTTCATGGC CTTGTCAACC CTAGAGACCC	120
TGCCCCCTCC ATAGCTAGCG AACGTCTCGA G	151

(2) INFORMATION FOR SEQ ID NO:1077:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

GAATTCGGCC TTCATGGCCT AGGAAGTAGT CTAAAAAATT AACAGTTATG GTTTTAATAG	60
GATCTGAAAG ACAATCTTTA AAGAAATGGG AGAAATTGGG GGTATCAGTG AACCTATACC	120
AACCTCTCTT TGTACATAAA TATGGTGATG TAGCTAGATA TAAAAATCAG TGTCTTACTG	180
GCACCATTTA CAGTTTAGAA AACAACTCTT TTCTTAAAAA TGCCCATCTG ATTTCTATT	240
TTAGGAGCTA CTTGGATTTG TATGTATTTT TTCTACGTGA AAATATATGT ACTCTTCACT	300
TTTGTTCAG TACTATAATT GTCATGCAC TCTTTCTCCC CTTTGAGAAC ATTCAGTGAA	360
ATACAACTTC ATCAAGATT TGCTCAAAGG AGAAGAATCG CATGAGTGTG AAAAGTAGAT	420
GCTCGTAGCC AGAACAGAAA AGGTTACACA TGATCATGGC ACAGAAGATA GGAGGTTTGA	480
CTTGGTGGGC CATAATGTTT ATTATCCTTT TTGAAATAAC AGGGACCAGC AGCACTCTCG	540
AG	542

(2) INFORMATION FOR SEQ ID NO:1078:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

GAATTCGGCC TTCATGGCCT AGGTTGCCAT TACTTGTGAT GCCTCTGAAT GTGGAGGCTG	60
ACTCTCCCGT CTCTCTGTCC CTCCTACCCC ACGGGGCCGC AGCAAAGGCC ATCCTGGGCC	120
TTGCACTGGG CCATGTCTTC AGGAAGATTC CTGAAGAGGA GGGCCCGAAA TACCTGCCTT	180
TATAGGTTCC CAGAGTGCCC TAGAACATTC TTAGATACAT ATTTTAAAC CAAGTAGGAC	240
TCCACCTTAT TTTCTCCAAT AGTCCCCAAG CAGTACAGGT CACTTGAAGA CATAAACATT	300
CTTCTTGTT GAGGGATCCA CGCCCTTGTT TCAGAAATGA CACCACAGAA GGCTGTGAGC	360
TCCAGGAGCA TCGGTTGGGA TGTCCGATG ACCGGGGTTT AAAGGTTTTC CTATTCTCGA	420
TAAAGCCTGT GCGCACTGTA CGGGGAGTGG GGGTGAAGCG TGTTCTCTAC ATAGGCAACA	480

CAGCCGCCTA AGTCACAAAG TCAGTGGTCG GCCGCTTCGA CCAACATGTG GTGAGCATTC 540
 CACGGGCGCA TGAAGTCTGG GTGCTGTGCT CGAG 574

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGGGGCCAGG CGGCCGCCGC GAGTCTGGTA TCCTGAGCTT 60
 CGTGAGTTGA GCGCTGCTGC TCCGCGGTGG AGTCACCGCA CCGCTCCCGG GATCATGGTG 120
 TTCTACTTCA CCAGCAGCAG CGTTAATTCA TCTGCCTACA CTATTTACAT GGGAAAAGAT 180
 AAATATGAAA ATGAAGATCT GATCAAGCAT GGCTGGCCTG AAGATATCTG GGAGAGAATA 240
 TAGAAGACAT CCCAAGGAA GTGCTGATGG ACTGTGCGCT CGAG 284

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GTGAACACCA GAAAATACCC TGCAATTCAG CAGAACCAAA ATCCATACCT GCCCTTTCAA 60
 TGGAAACACA GAAACTTGGT TCAGTTTGT CTCCAGAATC GCCAAAACCT ACTCCTCTTA 120
 CTCCCTGGA GCCTCAGAAA CCTGGCTCTG TTGTTTCTCA TGAGCTACAG ACACCTCTTC 180
 CTTNTCCTGA GCCTTCAAAA CCTGCCTCTG TTTCTTCTCC TGAACCTCCA AAATCAGTCC 240
 CTGTTTGTA GTCTCAGAAA CTTGCCCTG TTCCTTCTCC AGAACCACAG AAACCTGCCC 300
 ATGTATCTCC TGAGTCAGTA AAGNTACTA TTNGTAATCC CAAACCCAG ATTCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GCCCCGCAGA TGGGAAACGC ATCATATTCT GATTCTTACC TGGAAGGAAT TTTGTTGAAA 60
 GGGGTTTCA CCTGTGAGCC TTGGTCTGTC TCGGTAGGGT GGTCAACTTC AGTGGACTGT 120
 GGTTGGTTTC AGAGCGCCTG GCTGAGGAGT TCCACTGAGG GGAGCACTGG AGCAGCCCTT 180
 TGGCAGAGGC TGAGGAGGGA GATGGACCAG CCCACGCCTG GCACCTGGCT CCATGGCATA 240
 AGGAAAGGGA GATGCTGGCC TCTGTGCTCC TGCTGTCTT TCCTGTTTCT GTTTGCGTTT 300
 GACTTAGTAG CAACCGACAG AGTGGCAAGG GATTTGGTCT TCAGCAGTAG ACATCCTTCC 360
 ACCCTGCCCC TCAGCCAAGT CTCTTGCTGC CATGCCAATG CTATGTCCAC CCTTGCCCC 420

CGGCCCAAGA GTGTCCAGCG GTGGCCCACT TTTCCTCCC ACCACAACCT CGAG

474

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC	TTCATGGCCT	AATGTGTGTG	GCACAAAGAA	GAAAGTGGAC	TCTACACTGT	60
GTTAGTTAGG	AAAACCAGAA	ATTGGGCCAA	ATTGCCTGTT	TAGTGGGAGA	GATANCTTTT	120
GAGAGCTGTG	ATCCCGCTGG	TGTGGCTGGC	TCTGGGCAGA	TATTTGTATC	TGAAATGACT	180
CATGCTGTGG	GACCCTTCCT	GAGATCTAAC	ACTTACAGTG	GTTTGATCAG	AAATTGCACC	240
ATGCTTGCCA	AGCAACTTTT	GGACTAAAAG	TTGCTGCCCA	CGTATATCAG	GGGAAGAATA	300
TATATATATA	TATATATAGT	ACCTATCTTA	GCATCTGATT	TGTATGACCA	TACTTCAAT	360
GTAATAAAT	AAATTGGCTT	TCCAGCTTAA	ACTTCAATTT	CTTGTATATT	ATATGATCAT	420
GAGACAACCT	CCCTGGGCTG	ATCAACAGCA	GGACGCTAA	AAGATTGAGT	ATCTGAGTCA	480
GGAAGGTAGA	GGGCCAAACC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC	TTCATGGCCT	ACTACTATTC	AGAGACAACA	GTGACACGGA	CCTATGTGAT	60
GCTGGCCTTA	GTGTGGGGAG	GTGCCCTGGG	CCTGGGGCTG	CTGCCTGTGC	TGGCCTGGAA	120
CTGCCTGGAT	GGCCTGACCA	CATGTGGCGT	GGTTTATCCA	CTCTCCAAGA	ACCATCTGGT	180
AGTTCTGGCC	ATTGCCTTCT	TCATGGTGTT	TGGCATCATG	CTGCAGCTCT	ACGCCCAAAT	240
CTGCCGCATC	GTCTGCCGCC	ATGCCCAGCA	GATTGCCCTT	CAGCGGCACC	TGCTGCCTGC	300
CTCCCACTAT	GTGGCCACCC	GCAAGGGCAT	TGCCACACTG	GCCGTGGTGC	TTGGAGCCTT	360
TGCCGCCTGC	TGGTTGCCCT	TCACTGTCTA	CTGCCTGTG	GGTGATGCCC	ACTCTCCACC	420
TCTCTACACC	TATCTTACCT	TGCTCCCTGC	CACCTACAAC	TCCATGATCA	ACCCTCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC	TTCATGGCCT	ACCATTTTTA	TTAAACCCAA	ATCCATGGAA	AATATCATGG	60
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AAATGAATAA GCGTCTAACA GAAGAACAAG CCAGAAAAAC ATTTGAGAGA GCCATGAAAC	120
TGGAACAGGA GTTTACTGAA CATTTCACAG CTATTGTACA GGGGGATACG CTGGAAGACA	180
TTTACAACCA AGTGAAACAG ATCATAGAAG AACAATCTGG TTCTTACATC TGGGTTCCGG	240
CAAAAGAAAA GCTATGAAAA CTCATGTTTC TCTGTTTCTC TTTTCCACAA TTCCATTTTC	300
TTTGGCATCT CTTTGCCCTT TCCTCTGGAG TCTTTCTTGA GTACTGATT CATGTTGAAT	360
TGTATCCCAC ACATCATGGT CATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GCGATTGAAT TCTAGACCTG CCTCGAGACC GCCTACGAAT GGAAATCCAT AAGAATGAGG	60
CTTGGCTCTC TGAAGTCGAA GGCAAAACAG GTGGGAGAGG AGACAGAAGA CATAGCAGTG	120
ACATAAATCA TCTTGTAACA CAGGGACGAG AAAGTCCTGA GGGAAAGTAC ACTGATGATG	180
CAAACCAGGA AGTCCGTGGG CCACCCAGC AGCATGGTCA CCACAATGAG TTGATGATG	240
AATTGAGGA TGATGATCCC TTGCCTGCTA TTGGACACTG CAAAGCTATC TACCCTTTTG	300
ATGGACATAA TGAAGGTACT CTAGCAATGA AAGAAGGTGA AGTACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GCTCCACCAG CTACTGAGAA AATGGCCTGT AAAGATCCAG AAAAACCCAT GGAGGCCTGT	60
GCCTCAGCAC ATGTGCAACC CAAGCCTGCC CCTGAAGCCA GTAGCCTAGA GGAGCCCCAT	120
AGCCAGAAA CAGGGGAGAA GGTAGTAGCA GGAGAGGTAA ACCCACCAG TGGCCCTGTG	180
GGGACCCAC TGAGCCTCTT GTTTGGGGAT GTGACATCCC TGAAAAGCTT TGATTCATTG	240
ACAGGTTGTG GTGACATAAT AGCAGAACAA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GCAGAGACTT AAAGGGTTAA TAAAAATTGT AAAGCCAGCA GAGATTCCAG AACTAAAAAA	60
GACTGAACT CAGACTACAG GTGCAGAAAA CAAAGCTAAA AAGCTTACAT TGCTCTATT	120
TGGTGCCATG AAAGGAGGAA GCAAATTCAA ATTAAAACT GGAACAGTAG GGAAGTTACC	180

CCCCAAGCGT CCAGAACTCC CTCCAACCTCT AATGAGAATG AAAGATGAGC CTGAAGTAGA 240
AGAGGAGGAG GAAGAGGAAG AGGAAGAAGA GAAAGAAAAG GAGGAGCAGC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAAATGAGGG TCCCTGAAGA AGCTCTTAAG CATGAGAAGT TTACCATTCA GCTTCAGTTG 60
TCCCAAAAAT CTCAGAATC AGAATTATCC AAATCTGCAA GTGCCAAAAG CATAGATTCA 120
AAGGTAGCAG ACGCTGCTAC TGAAGTGCAG CACAAAATA CTGAAGCACT GAAATCCGAG 180
GAAAAAGCCA TGGATATTTT TGCTATGCCC CGTGGTACTC CATTATATGG GCAGCCGTCA 240
TGGTGGGGGG ATGATGAGGT GGATGAAAA AGAGCTTTCA AGACAAATGG CAAACCTGAA 300
GAAAAAAACC ATGAAGCTGG AACATCAGGG TGCCTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC TTCATGGCCT ACTCAAGAAT ACAGGTCTTA CTCGTATAGT CTTTGAACAA 60
TAGGCTGTGT GACTAAAAGA GAGACACAAT CAATTGCTTC CCAGTCAAGA AGCCAGAAAA 120
GCTTCAAAAC CTTTCCCCCT CCTACTCCT TGCCACCGCA CCTAAAAAAA AGAGAAATCT 180
TTTAAGTGTT TAAAATCTGT AGGAGTCTTA TGAAGAAGCA GCTTTATGTG TATTCTTTAT 240
GGCATAATAT TAATGCATGA AAATCTGTTG CTTTTTTAAA AATTGTGGCA AAATATACAT 300
AACATAAAAT TTATCATTTT AGCTATTTT AATATACAAT TCACTAGCAT TAAGTATTAA 360
TACATTCACA GCACCAATTGC AACCATGSCC ACCATCATCT CCAGAACTTG ATCTTCTTCA 420
ACGCCCCACTC GAG 433

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GACTGGGTCC ATGGGAGCAA GATTAGTGGC TGCTAAACTT GAACCGAAAA GCTTCAAACA 60
TACCCATATA GATAAACCAG ACTGCTCAGG GCCCCCCATG GACATAAGTA ACAAGGCTTC 120
TGGGGAGATA AAAATTGCCT ATACTTACTC TGTTAGCTTC GAGGAAGATG ATAAGATCAG 180
ATGGGCGTCT AGATGGGACT ATATTCTGGA GTCTATGCCT CATACCCACA TTCAGTGGTT 240

TAGCATTATG AATTCCTGG TCATTGTTCT CTTCTTATCT GGAATGGTAG CTATGATTAT 300
GTTACGGACA CCACTCGAG 319

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GTGCAAATTG AGCACATCAT TGAAAACATT GTTGCTGTCA CCAAAGGACT TTCAGAAAAA 60
TTGCCAGAGA AGTGGGAGAG CGTGAACTC CTGTTTGTA AACTGAGAA ATCGGCTGCA 120
CTTCCCATCT TTTCTCGTT TGTGAGCAAT TGGGATGAAG CCACAAAAG ATCTTTGCTT 180
AATAAGAAGA AAAAGAGGC AAGGAGAAAA CGAAGAGAAA GAAATTTGA AAAACAAAAG 240
GAGAGGAAGA AGAAGAGGCA GCAGGCTAGG AAGACTGCAT CAGTTCTTAG TAAAGATGAT 300
GTGGCACCTG AAAGCGGTGA TACTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GATCATGAAG TCCATCATCC CAGTGGTCAT GGCTGGCATC ATCGCCATCT ACGGCCTGGT 60
GGTGGCAGTC CTCATCGCCA ACTCCCTGAA TGACGACATC AACCTCGAG 109

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC TTCATGGCCT ACTGGAATTC ATAAGTCTAA ATGGTTCTAT GAGTCTAAAA 60
TTAAAGTGTT AGCAGGGCTG GGCTTCCTTT GGAAGCTCTA GAGAATGATC TGTTTTCATA 120
CCTTTTCCAG CTTGTATGAG CTGACTACAT TCCTTAGCTC ATGGCCCTGC TGCCACAGC 180
TTCAAATGAG ACAACACCAA GTTGAGTCCT CTTAGATCA CATCAATTTA AATCTCTAC 240
TATTCATATT TCCTGTGAC TCTCCTATGC ATCCTTCCTT CTCTCAAAG GATCTTTGTG 300
ATTATACTGG GCCCTCTGAA GAATCCATGA TAATCTTATC TCAAGGTGCT TAAGTTAATC 360
ACATTTACAA GATCTCCTTT TCCTCGAG 388

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

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GAATTCGGCC TTCATGGCCT AGGTGGCACA TGCTGTGGT CCCAGTTACT CGGGAGGCTG      50
AGGTGGGAGG ATTGCTTGGG CCCGGGAGGT CAAGGCTGCA GTGAGCCGTG ATCTTGCCGC      120
TGTAATCCAG CCTGGTGATA GCGAGACCCT GTCTCAAAAA AATGCTTTTA GGGAAATTAA      180
TATGTCCTGT GCCTGTTTAA TCATTGAAAA CATTTTAATA TTTTCAGAGC CATAGAGGGC      240
AGTGAAAAAC AGAGTAGCAG AATTGATTAT ACCAGTACTA TTTATCCAAT GGCTAATACA      300
AATAAGACTC TCAGGGATAA TTCACACGTG CTTCCAAGAA CACTAGATGG CACCAATTAT      360
TTAGGATTCA GACTACCTCA GGAACACGCT GTCTTCATTC AACAAATATT TATTAAATAA      420
TGAACAAAAC AAAAATATCT GTCATTGTGG AGCAGCTCGA G                                461

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(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```

GAATTCGGCC TTCATGGCCT AAACCTATGC AGATGCCTGT GATGAGTTCC TGGATCCCAT      60
TATGAGCACA CTGATGTGTG ACCCTGTGGT GCTGCCATCT TCCAGAGTCA CTGTGGATAG      120
ATCCACCATT GCAAGACATT TGCTCAGTGA CCAACACAGT CCCTTTAACC GTAGTCCCCT      180
CACCATGGAC CAGATCCGGC CAAACACAGA ACTAAAAGAA AAAATCCAAC GGTGGCTTGC      240
AGAGAGGAAA CAACAAAAGG AGCAACTTGA ATAGATACTG TGAACCTAAC AAACCAAAAC      300
CAACCCAGAG TCTCGAG                                317

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(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```

GCTGCAGCCA ACGCGCAGCT CCACTGGAAG AGGATGGAGA ACCTCAAGGA GGAGGAAGAT      60
GACGACTCCT CCACAGCCTC AGACAGCGAT GTTCTCATCC GGGACAACCTA CGAGCGGGCA      120
GAGAAGCGGC CCATCCTGTC TGTGCAGAGA CGTGGATCTC CCAACCCGTT TGAAATCACA      180
GACCGGGTGG AAATGGGACA AATGGCCTCC ATGTTCTTCA ATAAAGTGGG GGTCAACTTG      240
TTCTATTTCT GCATCATCGT TTACCTGTAT GGAGACCTCG CCATCTATGC TGCTGCCGTG      300
CCCTTCTCCC TCATGCAGGT GACCTGCAGC GCCACTGGCA ATGACTCCTG GCGGCTCGAG      360

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(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	AGTGAGCCAC	CGCACGGGGC	CTAACGATGA	TGAGAATTTG	60
ATGTGACATC	TGCAGGATCC	CCAGCTAGTC	AGCAGCATCT	AGAGGGCTAG	AACTCTGGCC	120
AGCTGACTGG	GCCTTTTGCT	AACTGTTTTC	TGTCCCCTCT	GTGCCGGGGT	GTCAC TGAGC	180
TTTGCGGGAC	AGGCTGGTCT	GTGCTGCCTT	CAGCTCAGGG	AATGTGGCTC	CCGAGCATAG	240
GGCTGGACTG	AGAGGCGTTA	GGTGAGCCAG	AGAAGGCCTC	AGACACAGGG	CTTAGAGAGG	300
GCTCCCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	ACCTGCAGCT	CTACAATATA	TTTTCAAAC	GCTTGATATT	60
GAGAACAAAG	GATACCTGAA	TGTCTTTTCA	CTTAATTATT	TCTTTAGGGC	CATACAGGAA	120
CTAATGAAAA	TCCATGGACA	AGATCCTGTT	TCATTTCAAG	ATGTCAAGGA	TGAAATCTTT	180
GACATGGTAA	AACCAAAGGA	TCCTTTGAAA	ATCTCTCTTC	AGGATTTAAT	CAACAGTAAT	240
CAAGGAGACA	CAGTAACCAC	CATTCTAATC	GATTGAATG	GCTTCTGGAC	TTACGAGAAC	300
AGAGAGGCTC	TTGTTGCAAA	TGACAGTGAA	AACTCTGCAG	ACCTTGATGA	TACATGATCT	360
CTGAAAGACT	AGACTGTCTT	ATATTATGAG	ATACTTGAAT	GCTGCATGTA	AAGCCTTTAA	420
AGCAAAAAAC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAGAAGATGC	AAGTGGACCA	GGAGGAACCA	CATGTTGAAG	AGCAACAGCA	GCAGACACCA	60
GCAGAAAATA	AGGCAGAGTC	TGAAGAAATG	GAGACCTCTC	AAGCTGGATC	CAAGGATAAA	120
AAGATGGACC	TACCACCCCA	AGCCAAGAAG	GCAAAAAGTA	AGACCAGTAC	TGTGGACCTG	180
CCAATCGAGA	ATCAGCTATT	ATGGCAGATA	GACAGAGAGA	TGCTCAACTT	GTACATTGAA	240
AATGAGGGTA	AGATGATCAT	GCAGGATAAA	CTGGAGAAGG	AGCGGCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```
GAATTCGGCC TTCATGGCCT AGTCATTTTA TAGGTTAAAA AAAGGTCAAA TTGTGACAAT    60
TTCATATGGT ACAATATAAA ATTATATTAA ATATACTCGA G                        101
```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```
GAATTCGCCT TCATGGCCTA AGAAATACAT AGATCAAGTA AACTCCAAC TACTGTAGCT    60
GGAATTGTA AACTAAGTTT GTAAGACCTC TTTTATTTCC TATGGAGTTA TTCTTTAATT    120
TACAGTTTAT TCTGTAAGTT GGAAGTAAA ATAGAGAAAA TAATAATCT AGATGTTCTC    180
AGTGTCTTAT TCAGGAACCT TTTATCCCTC CTCACTAAGG AATCCCACT GTGACTTTAA    240
AATAGAACTA AATTACTGT GTGCATGTAT ATGCTCTGTAT TTTTACACA CATGCAAAAA    300
TATACATTGG GGGCACGTGT GTGAGAGATA TGAATGTGTG CTTATATAAA AATAGATAAA    360
GGTAACCGAA TGTATTGTAG AAACATGATT TATTTAGTTG AGGGTATTGG AGTTACTTTC    420
TCATTGTCTC TGTTGTATAA ATACACCAA TTAATCATT TATTATCTTA TGTTAAAAGG    480
CTAGCTCTCG AG                                         492
```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```
GAATTCGGCC TTCATGGCCT AGGCCTGCGT TAATACTCTT AATTATAGAA ACAATCCTTA    60
ATTAATAAAC AAGTCCTTTC ATTGGAAAAA GAACTAATAC ATTTTGTCTC CTCAGTCAAA    120
ATTCTGTTTT TGTGGTTAGA GTAATAAAAT GGTAACACCT AGGGTCTGCC ACGATCATGG    180
TTCTCACTCT GGATTCATTC CCTACCACAT CCTTATTTC CTCCTCTTC CCATTCCCTC    240
ACTCACCTC CTCCTTTCCT TCCCTCACTC ACCCTCCTCT TCCCATTCC CTCACTCACC    300
CTCCTCCTTT CCTTCCCTCA CTCACCTCC CCCTTTCCTC GAG                        343
```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

GAATTCGGCC	TTCATGGCCT	AACCGGGCAA	AAAAAAAAAA	AAATCTTAAA	AGCACTAACT	60
TACTATCAAA	TCTCAAGAAA	CAGAAGCAAT	TTCAAAAAAT	CAATACTATC	CTTTTGGTCA	120
GTAACACTTT	CTTCATTCTT	AATGTATGAG	AACAATAAGG	ACATTTTAGC	TCCTTTACTC	180
TTCTTCATT	TAGTGACTTC	CACATTCTC	TCACCATTTT	TCCAGCCTCT	GGGTGTGGTT	240
CTGATGAACC	TTAACTTGA	AAGGCACAGG	CCAGAACTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

GCGATTGAAT	TCTAGACCTG	TCTTACGCTT	CCCTTCCTAA	GCCTTGTCT	ACTCTGCTTT	60
GTCTGCTTTT	ATGCTTCTCT	CTCTTTTGTC	TGAAGTGGTC	TCTGTCCTCG	TCCATGCTTC	120
AAGTCCTAAT	TCAAATGCCA	CTGTCTTTAT	GAAGGGCTCC	CTGATTGTTC	CAACCAAAAT	180
AAGCTTTTAT	TCCTTTGAAC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

GAATTCGGAC	TTCATGGCCT	ACGTTTTTAT	TACAAATATT	ACATTAAACT	AAAGCTCACA	60
ACTGTTACTA	TGCATCAGGA	ATTAACAGTC	ATTTCTCATT	TGTGTTATTC	TCCTATTTGA	120
TCACATATAG	TGACTATCTC	TTTATGGGTT	AAATATCAGT	TTCTTGGCCA	GAATTCAAGA	180
TCTGCCCCTA	ACNAATCCTA	CTTCTCCCAG	TACCCTTACA	GCACTCCTAC	CCTACTAGTA	240
ACCCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

AATTCTAGAC CTGCCTCGAG ATTGTCTGCC AGTTTAATTC TTTAAAACTC AGTTTAGCTG      60
TCCITTTTCTT TGGAACACTT TCCCTAATCT TCCCCACCAC CTGTTTCATCA ACATATATAG      120
AAGCACATTT ACTCTCTCAT TCTCTCTCTT TCTCTCTCCA AGTCTATGTT AGGTGTTTAA      180
GCGTTTATCA TAGGTTTATG TTTACTTATC TCCCCACTAG TCTATGAAAT CCTCGAG        237

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GATTATTAT AAAGCTGCAA AGAAGCTGTT GCACTCAGGA ATGAAAATTC TTAGCCAGGA      60
AAGAATTCAG AGCCTGAAGC AGAGCATAGA CTTTCATGGCT GACTTGCAGA AAACCTCGAAA      120
GCAGAAAGAT GGAACAGACA CCTCACAGAG TGGGGAGGAC GGAGGCTGCT GGCAGAGAGA      180
GAGAGAGGAC TCTGGAGATG CCGAAGCACA CGCCTTCAAG AGTCCCAGCA AAGAAAATAA      240
AAAGAAAGAC AAAGATATGC TTGAACATAA GTTTAAAAGC AATAATTTAG AGAGAGAGCA      300
GGAGAGCCTC GAG                                              313

```

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```

GCGAGAACAC CATCACCATG ACAACCAGTC ACCAGCCTCA GGACAGATAC AAAGCTGTCT      60
GGCTTATCTT CTTTCATGCTG GGTCTGGGAA CGCTGCTCCC GTGGAATTTT TTCATGACGG      120
CCACTCAGTA TTTCACAAAC CGCCTGGACA TGTCACAGAA TGTGTCCTTG GTCAGTCTG      180
AACTGAGCAA GGACGCCCCG GCGTCAGCCG CCCCTGCAGC ACCCTTGCCT GAGCGGAAC      240
CTCTCAGTGC CATCTTCAAC AATGTCATGA CCCTATGTGC CATGCTGCCC CTGCTGTTAT      300
TCACCTACCT CAACTCCTTC CTGCATCAGA GGATCCCCCA GTCCGTACGG ATCCTGGGCA      360
GCCTGGTGGC CATCTGCTG GTGTTTCTGA TCACTGCCAT CCTGGTGAAG GTGCAGCTGG      420
ATGCTCTGCC CTTCTTTGTC ATCACCATGA TCAAGATCGC GCTCGAG        467

```

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```

GAATTGCGGA AACGGTCGTT CCACTCGCTC CAATGTGGCC CCCAGGCACC TACCTGATAG      60
CCATATGGGT CGAG                                              74

```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

```

GAATTCGGCC TTCATGGCCT AGGAATTTAG GAACCAAGAT ACTGGGGTGT TATTGTTTCT      60
AAGCTCTTTC AGTGAACAGA TCTAGGAAAT ACATGTGTGT CCTAATCCAT GAATACACAC      120
TAAATATAAA TTATTTCTGT ATCTATGTCA AGCTAAACCT AAGTTCACAT TGAGGTTTCT      180
GACTTTAATA CAGTCCCACA AGGTCGTTC TAGCTTTCCT TCCTTGACATA CCTTTGACTT      240
TCCTCTCCAG CTGTGGGAAA CTTGGCTCTC TCCATCCACC ACCCCTTCAC TATTGTGTTA      300
ACCCTTGAC ATATATAAAG CAGCGTTGGA ACTGTCAACC TGTGTCCCAT GAGAACTTT      360
ACCCACTAGA GTACAGCGT TATGCAGTTC TTTTGTAGT TTTATAGAT TATAGCCAAA      420
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

```

GGTGAACCCG AATCACCGAT GGATGTGGAT AATTCTAAAA ATAGTTGTCA AGACTCAGAA      60
GCAGATGAGG AGACAAGTCC AGGTTTTGAT GAACAAGAAG ATGGTAGTTC CTCCCAAACA      120
GCAAATAAAC CTTCAAGGTT CCAAGCAAGA GACGCTGACA TTGAATTTAG GAAACGGTAC      180
TCTACTAAGG GCGGTGAAGT TAGATTACAT TTCCAATTG AAGGAGGAGA GAGTCACACT      240
GGAATGAATG ATTTAAATGC TAACTACCT GGAAATATT CTAGCCTGAA TGTAGAATGC      300
AGAAATTCTA AGCAACATGG AAAAAAGGAT TCTAAATCA CAGATCATTT CATGAGACAG      360
CCCAAACG AG

```

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

```

GAATTCTAGA CCTGCCTCGA GCTATACCTG TATCCAGTCT TGATGCACAC CAGGCTGGGC      60
ACTTTCCAGA AACTACCTCT AACCTCCAGG GTTCCCTCAT CACTCGAG      108

```

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```
GAATTCGGCC TTCATGAAGA TTGAGAAGAA GGAGGAAAAA AAGCCTGAAG ACATTAAGAA      60
GGAAGAAAAA GACCAGGATG AGCTGAAACC CGGACCTACA AATCGGTCTA GAGTCACCAA      120
ATCAGGAAGC AGAGGAATGG AGCGGACGGT CGTGATGGAT AAATCGAAAG GAGAGCCCGT      180
CATTAGCGTG AAAACCACAA GCAGGTCCAA AGAGAGAAGC TCCAAGAGTC AGGATCGCAA      240
GTCAGAAAGC AAAGAAAAGA GAGACATCTT GTCGTTTGAT AAAATCAAAG AACAAAGGGA      300
GAGAGAGCGC CAGAGGCAGC GGAACGGGA GATCCGCGAA ACGGAGAGGC GCGGGAGCG      360
CGAGCAGCGG GAGCGTCTCG AG                                         382
```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```
GAATTAGCAA AGGAAATCTC AGATTGCATT TCCAAAGATG GTTGCTAGCT GCTGCCGTTT      60
CCTTTGCTAT TTCTGTCGAA TTAGCCGGCA AAATCAGAAG GCCATGTTTG AGCATCTGAG      120
TTATCTTCTG GAGAATAGCA GTGTTGGCCT AGCCTCCCGG TCGATGAGGG GATCCACCCC      180
GCTGGATGTG GCAGCTTCCT CTGTGATGGA CAACAATGAG TTAGCGCTGA GCTTAGAGGA      240
ACCAGACCTC GAG                                         253
```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```
GAATTTTTTT TTTTTTAAA GAAAGAAAAC TAGGGCGATG CAATGTCCAG ACAGAAGCCG      60
GGGGCCGGGG CTCGAG                                         76
```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC TTCATGACGA CCGCGTCCAC CTCGCAGGTG CGCCAGAACT ACCACCAGGA	60
CACCCTCGAG	70

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAAAATGAAA AGTTCGTCTT TTGATGAAGA CAAACTTTT GTAGCAGAAA CATTGGAAAT	60
GGGTGAGGTT GTTGAAAAGG ATACAACAGA ACTCATGGAA AACTTGAGG TAACCAAGCG	120
AGAGAAATTA GAGCTGTCAC AGAGACTGTC TGATCTTTCT GAACAATTGA AACAGAAACA	180
TGGTGAGATT AGTTTTCTAA ATGAAGAAGT TAAATCTTTA AAGCAAGAGA AAGAACAAGT	240
TTCATTGAGA TGTAGAGAGC TAGAATCAT TATTAACCAC AACAGGGCAG AAAATGTACA	300
GTCATGTGAT ACTCAAGTAA GCTCTTTATT AGATGGAGTT GTGACTATGA CAAGCAGGGG	360
TGCTGAAGGA TCAGTTTCTA AAGTAAATAA AAGTTTGGT GAAGAATCAA AAATAATGGT	420
GGAAGATAAA GTTCTTTTG AAAATATGAC TGTTGGAGAA GAAAGTAAGC AAGAACAGTT	480
GATTTTGGAT CACTTACCAT CTGTAACAAA GGAATCTTCA CTCGAG	526

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

CGATTGAATT CTAGACCTGC CTCGAGCCGA CCTACTCCAC AGCTGTCCTG ACTGTGTAAG	60
CGAGATGATG ATTAGTGATC AGACGAAAGG ATTCCTGTCA TTGGTAACCC TCTCAAAGTA	120
TTTGAAAAC AGTTCAATTT TCATCTATTT CAGAAGCAGC CCGTGGTGTC TATTGAGGCT	180
CACCCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC TTCATGGCCT ACCATCCTGC ACTCAACCAA TCATCTGATG CTGACTCAGA	60
AGCTCTGTTT GGAGTACCTA ATGATAAGAA TTTACTGTGG GCTTATGCTG TTATCGGTAC	120


```

TTACATGTTT TTAGTTTCTG TCATTTTTTT TTGTCTGTTT TTAAAGAATA GCTCAAAGCA 180
AGAAAAAGCA AGAGCATCTG CTGAGACATT TCGAAGAGCA AAATATCACA ACGCCCTTCT 240
TTGTCTCCTT TTTCTGTTCT TCTTTTTTTA TGTGGAGCT GAGGTAACAT ATGGCTCTTA 300
TGTTTTCTCA TTTGCAACCA CCCATCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACAGATTTGC ATCTTTACAA CCAGAAGCTC AGGGAGAAGT 60
TGAAGGAGGA GGAGAACACA GTGGGTATGT TCAGATTGCT TTTGGGTACC CTGATCCAG 120
CCACATTGTC TACCCTAGAT GGGTGCTCAT GGTACTTCTT GGTGGCATT CAATAATAGG 180
TTGAGTTGTA TACCGTCTGT CTTTACACTA CATTATGAAA ATGAGATTAT TAAATAAGAA 240
TTTGTATGTA GCTGATAAGC TAGTAGAATT GGCACATGAT CCCTTTTATA CCCAGCCCTC 300
CTGTCTGGTG TGCTTGAGGT AATAATAACC CCTTTTATAC CCAAACCTCG AG 352

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCC TTCATGGCCT ACCAATCTCT TTTACTGAGC ACAATGTGGG TAAAACTGCT 60
CTCTATAGTA GCAGAAATTT GTTTTCCCC TTTCTAGTT ACTGATGAAG AGACAGCTTC 120
AGATGCTCTG GAGAGAAACT CTCTATCCTC TCAAGACCCA CAGCAGCCCA CCAGTACTGT 180
CTCAGTAACG GAAGATTCTA GTACATCGGA GATTGACAAG GAAGAGAAAG AACAAACCAC 240
TCAAGATCCT GACTTGACCA CCGAAGCAAA TCCTCAGTAT TTAGGACTGG CAAGAAAGAA 300
AAGTGGCATC CTGCTGCTCA CGCTGGTGTC CTTCTCATT TTCATACTCT TCATCATAGT 360
CCAGCTCTTC ATCATGAAGC TGAGGAAAGC ACATGTGATA TGGAAGAGAG AAAACGAAGT 420
TTCAGAACAC AACTAGAAA GTTACAGATC AAGGTCAAAT AATGAAGAAA CATCATCGCT 480
CGAG 484

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

```

GAATTCGGCC TTCATGGCCT ACTTATGTTT TTCTCATTTC TTGACCTAAA TGATCTTTAT 60

```

CCAAACTATT CCAAAATCTG AATTTCCTGGG TCCTTCTTTC TTAAAAATAT TCTGTTCAAT	120
ATTAAACAAA CAAACGTTTG AGAACATGAG TAACCTTTTG ACTTTATCCC GTATCTGTTT	180
GCTAATGTTT TGTTCATGT CTTCTTGTC AGAACACACT GTTGCAGCAG CTAGGAGTGC	240
ACTCGAG	247

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

GAATTCGGCC TTCATGGCCT AGGAGGAAGC TAATAAGAGA CTGTCAAGAT TGTATACCTT	60
CTTGTTTCT TTAAAGAATT TGTGCCTTT CTACTATTAC AGCAAAGCAG CATTTTGTTA	120
CTGACTGCCT AAAATCACTT AATCTCAGGT GAACGCATCA CTTGCCAAAC TGTGGAATG	180
CTATTGTGT TTTGTGCAC TGTTTTTTC GTTTGTTGT TTGTTATTT GGTGGCTTT	240
TTGGAGAGGG AAATTGGAA ACGGACACA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTACTAG CAGAGATCAG TGCTATAAGG GAAAAGGAGA TTGATTGAA AGAACTGGA	60
AAAAGAGACA TTCCCATGAT GGAGAAAGTA TCAGGAAAGA TGGCTGTTGT TGAAGAAATG	120
GAGGCAGATT TGAAAGAAAC TGGAAAAGAA AATTTAGAG AGAGAGGATC TGAAGAGATC	180
TGTGTTACTG AGGAAAAGGT GGCAGAATTG AAACAACTG GAAAAACAGA CATTTCTCCA	240
AGGGCCCTCG AG	252

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

GAATTCGGCC TTCATGGCCT AAACAGAATA TTCTGAGGCT AAAAGAAAAT ACACCCCGC	60
AAAAATCAAT ATAATATGA TTAAGTACAC AAAACATGCA GCCATAAAA CATATTTAC	120
CTATGAACT GAGACTGAGG AATTTAACAG TAAACAGTCA TTTGTTAAAG AAATATTTT	180
ACAATTTATT GCCTATGTAT AAGGCAGCAG GCCTGTACTC TCTTGATTT TCAATCTCTT	240
CCCCTACTCT GGCTCTTCCT CAGCATATAA ATATGTTTCT ATCCCTACCT TATGGAAACC	300
ATTCCCATC CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC TTCATGGCCT ACTTTGTAAC TGTGAAATAC TCTCCAGGAT TTAAAAGGCT      60
GTGGAGCTCC AGATAAAGAA TCGTTTATCT TTCTTCTGAA GAAATTCCTT TGGTTACAAG      120
TTTACCCCAT AAACGGCAAC ACACTCACCT CCATCCAAGA CAGACTCAAG GTGGAGGAAG      180
CGTGGAAATG TGCTTCCGGA CAAAGCTCTC AGTATCCTGG GTGCCATTGT TTCTTCTACT      240
CAGCCGTGTT TTTTCTACTG AGACAGACAA ACCCTCAGCC CAGGACAGCA GAAGCCGTGG      300
GAGTTCAGGC CAACCGGCAG ACCTGCTACA GGTCTCTCT GCTGGTGACC ACCCACCCCA      360
CAACCACTCA AGAAGCCACT CG                                         382

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT ACAGACTTCT GTGTGTGGGA CTGAAGCACC TGTGTGCAA      60
TCTGAAGAAG CTCTGGTTGG TCAGCTGCTG CCTCACATCA GCATGTTGTC AGGATCTTGC      120
ATCAGTATTG AGCACCAGCC ATTCCCTGAC CAGACTCTAT GTGGGGGAGA ATGCCCTGGG      180
AGACTCAGGA GTCGCAATTT TATGTGAAAA AGCCAAGAAT CCACAGTGTA ACCTGCAGAA      240
ACTGGGGTTG GTGAATTCTG GCCTTACGTC AGTCTGTTGT TCAGCTTTGT CCTCGGTACT      300
CAGCACTAAT CAGAATCTCA CGCACCATCT CGAG                                         334

```

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGTCTGTCCA TCTGCTTCT CTGGACCTCC TTCTCATACT      60
TTGAATTTTT TAAGTAGTTT GTCCCTCATA TGATTTTTTT TCTATTCCCT TTTCCCTTCC      120
TGTCTTCCT TCACTCCTTT CCCTCCACC TCCCTCCCTC CCTTCCTCTC TCCCTTCCTT      180
CCTTCCTTCC ATCCAACCAT CCATCCATCC ATCCATCCAT CCATCCATCC ATCCATCTAT      240
CCTCTCTCGA G                                         251

```

(2) INFORMATION FOR SEQ ID NO:1129:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```
GAATTCGGCC TTCATGGCCT AATTTCATGT NCCTTTGAGC TATCTTTCCA TTTGTAGGA      60
ACACCGTCAC AGGAGACAAT TTCATGGACC TTTGAGCTGT CTTCCATT TGTGGGAACG      120
CCGTCACAGG AGACAATTTT ATGTGCCTTT GAGCTGTCTT TCTATTTTGT AGGAACGCTC      180
TCAGAGGGGA CAATTTCATG TGCCTTTGAG CTGTCTTTCC ATTTGTAGG AACACTCACA      240
GCAGTGCTTG GGGTTCACTG TTACCTAAAT CCCATGATGG GTGAGAAGAC TGAATGGGAC      300
GTTTATTTT TGTGTTAAAA AGCCACGCA AATAGAGTTT AAAATAGTCT CAGTGAGCTG      360
GGCATTCTCG AG                                     372
```

(2) INFORMATION FOR SEQ ID NO:1130:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```
GAATTCGGCC TTCATGGCCT AGTGCCTAGT TACAAGGTTT TATTACAGCA GTATTTCTAA      60
ACATTTGGTT AGTCTGTCTC TGCTTTTCCC ACCATAATT TCTAGCACTT GTAGCTCACC      120
TTATCTCCCA CTTCCCTTTT TAAATAGAAA ACAGGCTTGT TCTGTTTGA CCAGGTATAA      180
CTCTTGCTC AGACTGTCTC TAAAGCCCAG AAAACTATT CTCTAGTGGT CCAATGAAGT      240
GTTCCCATTT GAAAGTTTGC CTCATGTCAC TCGAG                                     275
```

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
GAAAATTGAG CCTATGTTGG AGACACTGGA GAATCTTTCC TCTCGCCTGC GTATGCCACC      60
ACTGATCCCT GCTGAAGTAG ACAAGATCAG AGAGTGCATC AGTGACAATA AGAGTGCCAC      120
CGTGGAGCTA GAAAACTGC AGCCATCCTT TGAGGCCTTG AAGCGCCGTG GAGAGGAGCT      180
TATTGGACGA TCTCAGGGAG CAGACAAGGA TCTGGCTGCA AAAGAAATCC AGGATAAATT      240
GGATCAAATG GTATTCTTCT GGGAGGACAT CAAAGCTCGG GCTGAAGAAC GAGAAATCAA      300
ATTTCTTGAT GTCCTTGAAT TAGCAGAGAA GTTCTGGTAT GACATGGCAG CTCTCCTGAC      360
CACCATCAAA GACACCCAG GACTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GAATTCGGCC TTCATGGCCT AAAGTTATAC CAGCTAAAGT GCAGTAGTGT CACTTTTTTC      60
CTGTCAATAT ATAGAGACTT CTAAATCATA ATCATCCTTT TTTAAAAAAA AGAATTTTAA      120
AAAAGATGGA TTTGACACAC TCACCATTTA ATCATTTCCTA GCAAAATATA TGTTTGGCTG      180
AAATTATGTC AAATGGATGT AATATAGGGT TGTGTTGCTG CTTTGTATGG CTACGTTTTG      240
GAGAGAGCAA TCTTGCTGTG AAACAGTGTG GACTCGAG                                278
```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AATCATTATA ATTTAGTTTG AATCTTAAA ACCCCGTTAC      60
TAGAACTTAT GTTTAAATTT ATAAATTATA AATAGTTATA AATTATAAAT AAATTGAGAC      120
TGAGGCAGGA AAATCACTTG AACCCAGGAG GCAGAGGTTG CACTGAGCCA AGATCACGCC      180
ACTGCACTCC AGCCTGGGTG ACAGTGAGAC TCCATCTCAA AAAAAAAAAA AAATTATATA      240
TAAATTCTGG TAAGTAAGTT TGAAGAAAAA CCGATTCAA TAGTATATAT TCAGCTTTAT      300
AAATTCTGTT AAGCATATTT GAATGAGAAT TTATTAAAT GGTATATATT AAGTCTACGG      360
TTCTCGAG                                368
```

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

```
GAATTCGGCC TTCATGGCCT ACGTCTGATT CTCTAAGTTC ATTTCTTGGT GGTGGAGGCT      60
CATTTCTTCT GGAGTCACTG AAATTTTGG GATATCTTTC GAAGCTTGGA TCTTCCCTTC      120
GTGCAGTAGG TCGTGCTTTT TTCCCTCAC TTTGACCAAC AAAGCGATCC CGCCTTTCAA      180
AAGATGAAGA CTGTACTGCT GAACTCTCAG GAAACCTGCC CCTCTCTCGG TGATCAAAGT      240
CATTAAATCT GTTCTGTTGG CGAGAGTAGT CGGATCCATG GCCAAATCGT GCATCTGTAT      300
CTAGAGACAA CTTTTTATTC TCGCTCCAGT AAGGATCATC TCGCCTATGA TCTACATCAC      360
GTGGGCGTTT CAAGGAATTC CTTTTTCTT GTTCATAACG AAGCTGCTGT TGTGCGCTTC      420
TGAGTTCCTC TCTTCTCGA G                                441
```

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCAA GAAACGTTTT CTAAGTCAAA GGAATAAATC   60
CAAAGCCTCT AAGACTGGGT GAGAGAGAGG AAAAGAAATG ACGGAAGCAC TCGAG           115
```

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

```
GAATTCGGT TTTACTGAAG CTATGTTAGA AACGTCATGT AGAAACTCTT TAGATACTGA   60
GCTTCAGTTT GCTGAAAATA AGCCAGGCAT GTCTTTGTTG CAGGAAAACG TAAGCACAAA   120
GGGTGACGAT ACAGATGTCA TGCTCACAGG TGACACTTTG AGCACCTCAT TGCAGTCTTC   180
CCCAGAAGTG CAGGTACCTC CTACCTCCTT CGAAACAGAA GAAACGCCCC GTCGGGTACC   240
CCCAGATCTC GAG                                     253
```

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```
GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG   60
CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC   120
TGGCTCTTCA AGCACCGCCG GGCCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTTAT   180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTCATG TTCCGAGTGA TGTAATAAAT   240
GTGACCCTGA GCTGTGAAGT GCACTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA   300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG                                     339
```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```

GAATTCGGCC TTCATGGCCT AATTCAGAGG TGGTGGGACC TTGGCTATGA TTCTGTTCAA      60
GCCCCCTAAT TTTACAGATT TTATGGAATT GAGCAACAGA CAAGATGATT TTGCCTAGGT      120
TCATAAACAG GAAAAAAGGA GAGCCAGGAA AGAACTCAAT TGTGTAAAC TGCTGTCTTG      180
TCTTGATGTT CTGTCTTCAT TCATCATCCA GCCTTTCCTA GGAGTGTGAG AGATAGACCC      240
AGGTAGAAGT GGGCTGCCCA TGGGGGGCTT AGCACAACAG AAATTTATTC TTTTACTGTT      300
CTGGAGGCCA GACATCTAAA ATAAAGGTGT TGATGGGGTC ATTCTTCCTC TTGAGGGGTC      360
GAG                                                                                   363

```

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```

GAATTCGGCC TTCATGGCCT ACTTGTAGAA TATTGAGCAA TTTGTGTGAA GTGGGAAGA      60
TGAAAGAAGT CAGAATTGA AACGGAAGAA TGAAGAAAAG AAATAAAAAT GAAGTTAAGA      120
TAAGAAGTAA TCTGGAATCA GAAAGCACTA CGCTAAGAAT CCCGTCTGTC TTCCAGAAGT      180
GGAAGTGCTC ACGGATCGGG GAAATCTGCA AGGCATACCC CTGCAAGGTC TCGCTCCAAG      240
GAAGATTCCA GCGCTTCCAG ATCAAAGTCC AGGTCCCGAT CTGAATCTAG GTCTAGATCC      300
AGAAGAAGCT CCGAAGGCA TTATACCCGG TCACGGTCTC GCTCCCGCTC CCAAGGACGA      360
TCTCGAG                                                                                   367

```

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC TTCATGGCCT ACACCCTCAC CACCCAAGGG GTCATCATCT CTGGCCACCA      60
CTCCACCAGA TGGGCAGAGC AGCTATGACC GCCACCCAGC CCTCCCGCTC AGGCCACAGC      120
CGGAGCCTCC GCATTGCCCC CACCCCATT TTCCAGGGGG GTTGTAAATTT ATAAGCTGAC      180
GAAGGTAGCC AGACTTCCGG AGGACTGACC ATCTCTCACT GTCCTCCCA CCTTCTTCCT      240
CACTCACACA TTTTTTGTAC ATCTGGGCCC TTAGTTTTTA TTCTGTTTAT TATATGTCTC      300
TGTCTCTCTC TATTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT      360
TGCAGGAGTG CCACCCCAAG GGCCTCGAG                                                                                   389

```

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC	TTCATGGCCT	AGCAGCACTA	ATCTTGATGG	GACAGAAAAT	TTCAAATGAA	60
GAGCTTTCCC	TCTTTTTC	TTCCTTGGGG	GCATGCCAGC	TTGTGCTTCT	ATGTCAGTAG	120
CCTTGATGTT	GCCATTCCTG	GCCCAGACAC	TTGCATGCAG	TTTGGTTTGT	CCTCCACCAC	180
TTTGATCATG	TTGCCCATGG	TCTAGACACC	TCCGTGTCCT	TGTATCATG	GCATATAGTC	240
TGTATGCCTC	TGCTGGATTT	ATAAGCGGCC	CCATAATAGC	CTTCCTTTCT	GGTTACCCCC	300
TTGATCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC	TTCATGGCCT	AAAAGATCAG	ATTTTGTCAT	TTAAGACACA	TATTTTACAT	60
TCAAAAATGT	AAAGTCAGGG	TGTGTCTTAA	AATCCATTGG	TGTTTAAATC	ATGCTTAAAC	120
ATGTGACTGC	TGTTGGCCAG	GATACAGTTG	TGGTGGTGTC	GTCAGTATCT	GAGCACATGT	180
GAAGTTNGCC	ATGACTATTC	ATATTGTCTT	CTCTTAAACT	GAATTATGTC	CATGGTTGCC	240
AACATGTACT	GTCCATAGTT	GCCACCATGT	ATTTAGGTTG	TCATTTAAAA	TGTCCTCAAA	300
AAGATTTCAC	CATGATTCTC	CATCAAAATA	GAAAGCTATT	TTGTATGAAG	AAGAACTCAG	360
ACCAGAAAAG	TCTGATAAAA	ATAATCTCTT	AAATAAGTCT	ACATTAGGTC	TTTCAATTTG	420
TATAAAATGT	AAATTTTGAA	TTATAAGAAA	ACAATTTGTT	ATACTGTAAT	TGGTAGCATT	480
TTTTCTTAGT	AGTGATACAA	ATAATGTGTA	CCTTACATTC	AAATCTCGAG		530

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC	NNCATGGCCN	ACCTATGTNA	NGNATTTCNN	CTCCATTINC	CCNAGGGTTC	60
TTTCCTGTTC	TTAGAAATGT	TTTGATGATT	TGCTTCAGAC	ACAGTTTGTC	TACTTCTNGT	120
AAGCATTGTT	CTTAGATNGC	TGGCTTTATA	TCTATCACTC	CCTTGCTCAT	CTGCCCCATCC	180
ATCTATCCAT	CCATCCATCC	ATCCATCCAT	CATCCCTCCA	TCCACTTGCT	CATCTGCCCA	240
TCCATCCATC	CATCTATCCA	TTCATCCAGT	CCATTACCCA	CCCACCATCT	ATTATCCATC	300
CATCCATCCA	TCCATCCATC	CATTATCCA	CTCACCATT	CATCCATCAT	CCATCCACTC	360
ANCCATCCAT	TCATTAGTTC	ACCCTTCATC	CATTCACTCA	CCCATCCTTC	CATCCACTCA	420
TCCAATCACC	CATCCATCCA	TACATCCACT	CATCCATTCA	CCATCCATAC	ATCCACTCAT	480
CCATTATCC	ATCCATCCAC	CCACCCAGAC	GTCCGTCCAT	CNATCCATCC	ATCCATNCAT	540
CCTTCTATNN	NNTCTGCCAA	CAATCCANAC	ACNTGTCCNT	CNATCCCTTC	CAACCACTCA	600
CCCAGCACAC	TCGAG					615

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGC CCTCGAG

57

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 227 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC TTCATGGCCT AGGTTTTCTT TTATTAAAA GATCATTAC AAAATACCAT	60
ATCCATAGAT TACTTTCTG TCATATAGCT GAATGTGTTA AGTGTGTTGA ATTCCATTCT	120
TACATTTAAA GGTCAACTGG ATTGCCAGC AGTTTAGATG CATGTGTTTT GTTCTTTATC	180
TTATCCACAT TGAAGATGTA ACTATTGAAT TCTAGACCTG CCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 447 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

CTCGAGTATC TCCTCCTTTC TGATATCCAG TTTAGGTGGT CCAATTTTTC CATCTCGGCA	60
TACAGCAAAT TCTTCTGACT TTGCATAGGC AGATTCTTTT TGTCCAACCC TGGCTTTAAT	120
TCTGACCCAA AGAGAATTG ATGGATCACC AACATGATCA GAAATATTAC AATAATGATG	180
AGAAATATTG ATGCAGGCAT CAATCCATTC TGAATTCCTA ACACCATAGT TCTTTACCTC	240
TACGGTAAAA ACAGGGACCT GTGGCATGAT CTGGTACTCC CAATATACGA TAGGGTTCAT	300
GTTATAGGAT TCAATTGTAA CATTAGTTGG TGTAGGCACT GAGGACGGCC CCAGATCCGC	360
GGTGCCCATC TCAGCCCTGC TCACACCTG CATGACAAGG GGTAGGAGAA AGAGGAGAGC	420
CATGCTGCTA CCGACGGTCG CTGGCTC	447

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GGGCGCCATG TTTGCCATCT CAGGTCCAGG TTTCTCCCGG ACTTCGAAGA GCTCATTATC      60
GGGTCTGATT TTCAGTCCT TCTGCAGAGT CTTCCGGAGC TCCAGCATCC GCTGCTGCAT      120
CTGCTTTATG GTCTTATTTT TCTCCAGAAG TTGCTGCTCC AAGTCCTGTT TCTCCTTCTG      180
TAGCTGTGTG AGATCCATGG CCCCAACCTC ACCATTGTTG GTTCTTCCTG CAGTTGGAAG      240
CTGGAACACA GGGTCTCTGA TGGCCCTCGA G              271

```

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GGATTGGGGA GGGAGTGTGC GAATAGGTGT GGGTGACAGA CATCAAGTAC TTAACAGGGT      60
AATAGAATAT CACAAGGCAA GTGGAGGCAG GGCAGAGATCA CAGGACCACA GGACCAAGGC      120
AAAATTAAAA TTGCTAATGA AGTTTGGGC ACCATTGTCA TTGATAACAT CTTATCAGGA      180
GACAGGGTTT GAGAGCAACC GGTCTGACCA AAATTATTA GGCGGGAATT TCCTCCTCCT      240
AATAAGCCTG GGAGCGCTAT GGGAGACTGG AGTTTATTTC ATCTCTGCCT GCCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

```

GAATTCGGCC TTCATGGCCT ACGGCATTTC AGCGTCAAGT GCACTTAGCG GGGTACCCGG      60
CTCCCCCAGC CCCACACCCC GTCCTGGGTC TCAGGGTGGT TCCAGCTTCT CTTTGGGCAG      120
CCAGAAGTTG GAGTCCCATC CCCCANNGNA NATTTTTTTT TTTTTTTTTT TGTGATCAGG      180
GAGTGTGTCC AACGTAGCCC CTGGCCTGT GCAAGCCCTG ACTCCCTCAT GGTGCCTCGG      240
AGAGTGGGGA GCATATTGGG CTGGGGTAAG CACTAGACCC AAGTAGACTG GACACAAAGG      300
GCTCGCCCAG GGCCCTGGCG CCACCCCTCG AG              332

```

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

```

GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180

```

CTTGTTCCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA	240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC	300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTGTGTGT TGTTTTGTG	360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT ACCCAGACAA ATACCAAGTT TATTCACAA AACTAGGAA	60
GATGGGTGTA GGGTGGAGGT GGGGGACACA GGTGCGCAGC TGCACAGAGT CAGCAGCAGC	120
AGCCTGCTCC CCGCACTGAG GACTCGGCCT GGANTGCAGT GCCTCCAAAT CAACACGCAG	180
CAAGAGGGGA GTGCAGGGAG GGCCCTGAAC ACCAAGCCTC TGAAAGGCTA AGGGACACAG	240
CTCCAGCTGT CCCAGGAAAA CCAGCAATAA ATAAAAGTGA GGCACGGCCC CACCCACACA	300
TATCATCTAG TCACCCATCT TCACTCTGG	329

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGCCT ACCCATAGCC ATGAGCATGA CTGGCTGCCA GCTCTTAGTC	60
ACCAAATGCC ATTCTCCGCT GAAAGAAGCA AGGGCTTTTC AGAGAATAGA CTGAGCACAA	120
AAATGACAAT GGTAATGGAG TAGAACACCT TGACTTTTAA AAGTCCACGA GTCCACAGTG	180
ATGCCTAAGG GAAGTAGGGA GGAAAGCTCT TCTTTACAAC ATCTTCCAGC TAACAGATGG	240
AAAAGGAATG ACAAATGAA AAATCACCAT ATTGCAACTC TCAATAAAGT AACTGATTCA	300
GGCATATCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GGGCTCCTCG CCAAGGAACT CGTGGCAGAA GAGGGCAGCA GTTGGCAGTA GCTGCCGATG	60
TCTGTCCCA GCTCCACCAT TCCTCCCTGT GGCTGTGCCG TGCTCGTGGT TTCAGTGTCC	120
GTGTGTCCAT GTGTCTGCCC TTCAGGAGCT CGCAGCTGGT GTGCTTGGCG GTCCCAGGCC	180
TGTGTAGTGT CTCTCCCTG CTGCGGGCGC CCCCACCCCG ATTCCTCTCC CCAGAAGCGG	240

TGGGATGGGC CCCCATGAAC TGCAGCAGCA TGCTGAGGTG TCCATGTTGT CTGCCTTTGT 300
ATAAAGAAAC AGCCTCTACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GCGAGTTCAG CGGAGAAAAG AAAAAGCAAC GTTTAATTCT AGAAGGCCTC CTGTCCCTGC 60
CTGCTCTGGG TGCTCATGGA ATCAGCTGCT GCCCTGCACT TCTCCCGGCC AGCCTCCCTC 120
CTCCTCCTCC TCCTCAGCCT GTGTGCACTG GTCTCAGCCC AGTTTATTGT CGTGGGGCCC 180
ACTGATCCCA TCTTGGCCAC GGTGGAGAA AACACTACGT TACGCTGCCA TCTGTCACCT 240
GAGAAAAATG CTGAGGACAT GGAGGTGCGG TGGTCCGGT CTCAGTTCTC CCCCAGCTG 300
TTTGTGTATA AAGGTGGCGC ACTCGAG 327

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC TTCATGGCCT ACGAGCCCTT TGCCTCCAGT AGTCCACCTT TTCTGGACTG 60
AACTGATATT CACCTTACAC AAATGGATTG ATGTCTCATG TCTCCCTAAA ATGTACAAAA 120
CCAAGCTGTG CCCCAACCAC TTGGGCACAT GTCATCAGAC CTTCTGAGGC TGTGTCACGG 180
GTGCACGTCC TCAACCTTGG CAAAATAAAC TTCTAAGTT ATCTGAGACC TGTCTCAGAT 240
TTTTGGGGTT CACACACCAT ATGTCTGAAT ACTGTCTTTT CCTATCTCTG GCTCCATCCC 300
ACATTGTAAG GGGCCTTGCA CACACAAATG TGGACATTCC AGCCTGCACA CCTAAGCATC 360
GCCTCCACTC CCACCCTTCC AGCGGATGGG TGTGAAACT GGCAGTGTG TTCATCTTCA 420
AGATGATGTA TACAGGAAAG TGGTCCAGGC AGATCCTGTG AGCAGGCTTG GGCCCACTTG 480
GGAAGAGTAA CCCAGGATCT CGAG 504

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GNNNNNNNNN NNNNNNNNNN TTCCCCCTTN TNNCATGTTT TGTTCCCTTN TCCTTGTTTN 60
TTTTTTCGGC AAAATATTTC AAGNTATACC CAGGCAACAT NAANTCCAGT TCGGATTTTA 120
ATTAGTCGAG TATGCAGCGT CTTTTCATT TTATTACTCA AAAAAGTTTC ATTTTTTTAT 180

```

TTAGCTTTCT GACTCTGTGC TTGTGCCTTC AACACTTTCA CAACGATTTT CTGCTCCTCG      240
ATAAGGAAAG CACGCTTGAT CCTGTCACGA ACACATTTAG CACACATGGA ACCACCATAG      300
GCCCTGCTGA CATGTTTCTT TGTTTTGGAC AATCTCATAA GAACTTTTAGG TCTTACAGCA      360
CGAACCCCTC GAAGTCTGCC TGGGCACACA CCACATGCAG ATTTTGGTGC TTTCCCAACC      420
TTCTTGGTAT AAAGGTAAAC AATTCTATTA CCAGGGGTTC GGGACAGCCT AGTTTTGTTA      480
GAGGCTGTAT TGTAGGAAAG CCTACGTCGG TATGTCAAAC GCTGGACCAT TCTGAGTGCC      540
TGCAGACAAC CAAGGGTGAC TATAATGACA GCGTCAAGT TGTGGACTGT GGACTAAGTC      600
TGAATGATAC TGCTTTTGAG AAAATGATCA TTTCAGAAAT AGTGCACAAC AACTTACGGG      660
GCAGCAGCAA GACTCACAAC CTCGAG                                           686

```

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```

GCAATTGCT TTTTAAAAA TACATTTTCA TACACTAAGT TTTCTGTTAG CCTAAGTAAT      60
TATATTCTA ATTAAGTTCA AAGTAATTGA TAGGTGGCAA AGGATATCAA TCAAAACCAG      120
TCCAAGTAAA AAATGTACAC TAATTAATA ACAATATTAT TCTATATTAC TTTTTTTTTT      180
TTTTTTTGAC ACAGGAGTTT CACTCTTCTT GCCCAGGCTG GAGTGCAGTG GCACGTCTCG      240
GCTCACTGCA ACCTCCACGC CCCCAGACT CGAG                                           274

```

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

```

GAAGATGGAC AACCGGGATG TTGCAGGAAA GGCTAACCGG TGGTTTGGGG TTGCTCCCCC      60
TAAATCTGGA AAAATGAACA TGAACATCCT TCACCAGGAA GAGCTCATCG CTCAGAAGAA      120
ACGGGAAATT GAAGCCAAAA TGGACAGAA AGCCAAGCAG AATCAGGTGG CCAGCCCTCA      180
GTCCCCACAT CTCGAG                                           196

```

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

```

GAATTCGGCC TTCATGGCCT AGAGGTGAAA TACAGAAAGC CTTTTTTCT TGATCTTTTC      60
CCGAGATTCA AATCTCCAAT TCCATTTGG GGGCAAGTTT TTTTCTTCAC CTTCAATATG      120

```

AGAATTCAGC GAACCCTCGA G

141

(2) INFORMATION FOR SEQ ID NO:1160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

```

GAATTCGGCC TTCATGGCCT AGTAATATAT ATAATTTATA AGTAAATATA AATTAGGGAG      60
GTGTACTCAA CATTTTCATA GAATACATAG TCAAAAATGG TTTGCAACCT CTGCCTAACA      120
AAAATAAAAC ACCCTACATC TTTGGTTCAA GATTGTCACC CCCAACAGTT GTGTGAAATG      180
TGGGGCAGGA ATTATCACTA TTTTCCTTTG GAAATTAAGG TTCCAAAGAT AATGAGACCA      240
GAGCCAAAGG TCAGAGTCCA CTGTCTTCTC TCTGAGGCCT CAATGTGAAG ACCTGAAC TG      300
TGGCAGCAGA TAATTCTGGA GACCTGTAA TCAGCTGTAT GCACCACAAC TCGAG      355

```

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GTATTTATC ATATAATTTT CTTCGAATTG GGAATTTAGG CAGTATGTTA TGGGATTTT      60
TTTTTAATTT ATTTT TTTT TAGGAA GCTTGTCTTCT CTTTGCATT TATAGAGAGC      120
ATGTTTATAT TAAAGAGTAC CTTCATACT ATAGAACACA TTTGTGGGTG GATTCGGTCC      180
TTTTCTTTCT ACCCTCCCTG ATTGCTGCTA ACAATCCAGA AAGACAGAAA TTTTGTTTTC      240
ATTCAGGCAC ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60
AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC      120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCGAGGCTG GTATTTAAAT TGCCTGTTGG      180
CAGGAACTTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG      220

```

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```
GAATTCGGCC TTCATGGCCT AATCACTTGA GGTCAAGGAGT TCATGACCAG CCTGGCCAAAC      60
ATGTTGAAAC CCCATCTCTA CTAAAAATAC AAAAATTAGC TGGGCATGGT GGGGGGCACC      120
TGTTAGTCCA GCTGCTAGGG AGGCTGAGAC AGGAGAATCA CTTGAACCTG AAAGGTGGAG      180
GTTGCAGTGA GCGGAGATCG TGCCACTGCA GTCCAGCCTG GGTGACAGGG CAAGACTCCG      240
TCTCCAAAAA AAAATTAAAA ATAGAAATAC ATTTTAAAC CCAGATACTT GTAGCATATA      300
TAAGGGACAA TTGCAGTTTG GAAGGTACTT CCACATGTAT TATATAATTT TATTTTTTAA      360
AATGAATCTC ATTTGGTTGT CATGAAATTT GGCAAGCTTC TCGAG                      405
```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCG AGAGGAGGAG GAGAAGAAAG CGGAGTTCGA      60
GCGGCAGCGA AAAATTCGAC AGCAAGAAAT AGAAGAAAAA CTCATCGAGG AAGAAACAGC      120
ACGAAGAGTA GAAGAATTGG TAGCAAAAAG GGTGGAGGAA GAACTGGAGA AAAGGAAGGA      180
TGAAATTGAA CGAGAAGTTC TCCGAAGGGT GGAGGAAGCC AAACGCATCA TGGAAAAGCA      240
GTTGCTCGAA GAACTCGAG                      259
```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```
GAATTCGGCC TTCATGGCCT AAATTTTCAGC AATACAGCTC TCACATACAT AAATTATAAA      60
ATAATTTTAT TTAAGGTGAT GAAATTTATA AGCAGGTTCA AAAATATAAT AAAA          114
```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAC ACCCAACACT GTCTGTTTTT CATTGTTGG      60
TTTTAATCAT AAAATTGTCA AGTGATTCGT GTTTGTACTT TATTTTTTTG TGCCTTCTGA      120
AAGGATCTAA AACAAAAATA TTTTGCCTTT TTTTCCCCAC GTGTATCTGA ACATTAAGCA      180
GATTGGCTCA GACACAATGA AAAGGATAAT CCAATGTACG TGCTGGTGCA CTCTGCTAGT      240
TGTTATCTCT GTAGGGCTCA GGAAGCTGGA AGGAGGAAGG GAGGGTAAGT GGCCTGGTGA      300
GTGGAGGTGG CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTACCAAT AATTTCTTCA CTTCTTCAAC TGCTCTCTTC      60
AATTTGATT CTGCTCTGTT CTGAGCATCT TCCACAGTGA TTAGTACATG TAAATCTTCA      120
TTTAGATGCT CCCAATTGGG CTGCTCTCTA TTTGCTCTCT CCTTTTTTTT ATCCCTCATT      180
GAGCCTTTGC CTCGGACCAT GATTTTACAT CCGGTTTCTG CTTCAAGTTG TTTGGCTGTA      240
AGTCTCTAG GTCCAAGGAT TCTCCAACA AAATTAACT TCGTCCAGCA GCCGCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACCTTCACAG AAAAATGCAT AGCTGGATGC TGCAGACTCT      60
AGCGTTTGCT GTAACATCTC TCGTCCTTTC GTGTGCAGAA ACCATCGATT ATTATGGGGA      120
AATCTGTGAC AATGCATGTC CTTGTGAGGA AAAGGACGGC ATTTTAACTG TGAGCTGTGA      180
AAACCGGGGG ATCATCAGTC TCTTGAAAT TAGCCCCCCC GATCTCGAG                                     229

```

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AGTGCTGGGA GCGCAGCCGG CGGGCGAGGC TGCCTGGAAC      60
GTGGAGCTGC TGGAGCTGTC CGGCTGACCT GGAAAGTTCT TTGGCCTCTA GGCTTTACCT      120

```


GGAGGCCTCT TCCTTCAGCT CCTTGTTTTT CCGCACCTCC TCGGCGTGCT TGTCTTCTC	180
TTGCAGCCGT TCCAACATGG CGGCGAGGTG GGCCTCCCTG TTCTCCTTGT TGGATTCCAT	240
CTTCTGGGCC AGTTTTTCCT TAGCCATCTT GATGAAGTTG TTGTTTCCT CAATGGCCTT	300
TTGGATCACC TCTCTCAT GTTCCCGGAA TTCTAGACCT GCCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:1170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GGCTTTTTCC AAATTGCTCT GGCTACCATA TAGAAAATTG ACTGAAGGAG GGCCAAGATG	60
GAAACAGAGA GGACGCTCGA G	81

(2) INFORMATION FOR SEQ ID NO:1171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCTGAG GGAATACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG	60
CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT	120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA	180
GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA	240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA	300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA	360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAAAACAGCA CTGCATGTCT TTGGCAAGCC ACAAGTTTCA TAGATACAGC TGTGCTCACT	60
GCAGAAAGCC TTTTCATAAG ATAGAAACAT TGTACCGACA TGCCAAGAT GAGCATGACA	120
ATGAGATAAA GATTAAATAC TTCTGTGGGC TTGTGATCT TATCTTTAAT GTGGAAGAAG	180
CATTTTGTAG TCATTATGAG GAGCACCACA GCATAGATTA TGTATTTGTG TCAGAAAAAA	240
CTGAAACTTC AATTAAACC GAAGATGATT TTCCAGTAAT AGAGACCAGT AACCAGTTAA	300
CTTGTGGTTG CCGTGAGAGT TACATCTGTA AAGTCAACAG AAAAGAAGAT TATAGCAGAT	360
GTCTCCAAAT CATGCTGGAT AAAGGAAAAC TGTGTTTCG CTGCAGTTA TGTTCGGCAA	420

CAGCACTCGA G

431

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT ACCCCTTAAA GGAAAGAATG GCTGCTCTAG AAGAAAAGAA	60
TGTTTTAATT CAAGAATCAG AAACCTTCAG AAAGAATCTT GAAGAATCTT TACATGATAA	120
GGAAAGATTA GCAGAAGAAA TTGAAAAGCT GAGATCTGAA CTTGACCAAT TGAAAATGAG	180
AACTGGCTCT TTAATGAAC CCACAATACC AAGAATCAT CTAGACACCT CAGCTGAGTT	240
GCGTACTCA GTGGGATCCC TAGTGGACAG CCAGTCTGAT TACAGAACAA CTAAAGTAAT	300
AAGAAAACCA AAACTCGAG	319

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAATTCGGCC TTCATGGCCT ACTTAATATA TTTGTGAGAT AATTATTGAG ACATTTTATT	60
AATATTTTAT TTAGTCTTAG AATTTCAGAG AAAAGTGAAC CTAGAGAGGT ACTTCTCCTG	120
GTTCAAACG TGAACATGAA AATTCTGAAT TTAAGTAACT GGATCCTCGA G	171

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AAGGAAACAA AAAGCTAAGG GCAAAATGTA CAACTTAGA	60
AGAATTGGAA GATAGAAACA AGATAGAAAA TGAAAATATT GTCAAGAGTT TCAGATAGAA	120
AATGAAAAAC AAGCTAAGAC AAGTATTGGA GAAGTATAGA AGATAGAAAA ATATAAGCC	180
AAAAATTGGA TAAATAGCA CTGAAAAAAT GAGGAAATTA TTGGTAACCA ATTTATTTTA	240
AAAGCCCATC AATTTAATTT CTGGTGGTGC AGAAGTTAGA AGGTAAAGCT TGAGAAGATG	300
AGGGTGTTTA CGTAGACCAG AACCAATTTA GAAGAATACT TGAAGCTAGA AGGGGAAGGA	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:1176:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 222 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```
GAATTCGGCC TTCAGGCCTA CAAGAATTTT ATGCCATCCA AGAGTATTAG CACAAATAAA    60
TAAAGGCAAT TTGTAAATTT TTTCCTGAA AATCTAAAAA ACAAGAAAAC TATCTCTTCA    120
GGGTGATTAT AATTAGGTCT ATGAGACTCT CAAGGTCCTT TTAGTGATTC AGAATCTATA    180
GTTGGAAATA CTTATTTTAA AATGTTTCAGG CAGTTGCTCG AG                222
```

(2) INFORMATION FOR SEQ ID NO:1177:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```
GAATTGTCCA CAGCCTGTCA TGCCGCACAA CTGTCCACGC TCGGTTCTCT CGGATATCAC    60
AGTACACTAC AAATGGCTTC AGGGGGCCAC TGCCATCAGG ATCAATGGTG AAGTTTCCAG    120
AAGTTTCCCC ACTGAGCCGA TAAGCCTCAC AGGATTCCTT ATACAAAGGT GTGTGGCAGG    180
TCTCTCCCTT GTAGCCCGTC AGTTCGCAGT AGCAAATGAA GTCATCCCAA GACTGGTAGC    240
AGCGTCCATC ATGCTCACAC ATGTTAGGGC TGCACCTATC AGTGATGCCA CATGTATCAA    300
AGAGGACCTC AGCATAGAAT CCAAGCCGCC GGCCCTCCAC CAGAGTCAGG TTGACCAGTT    360
GACCGAG                                367
```

(2) INFORMATION FOR SEQ ID NO:1178:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```
GAATTTAGAA CGGGTACAAA AGGACCTAAG CCAAACACAG TGTCAAATGA AGGAAATGGA    60
ACAAAAGTAT CAAAATGAAC AAGTTAAAGT GAATAAATAC ATTGGAAAGC AGGAGTCTGT    120
AGAGGAGAGA TTGTCTCAAC TACAAAGTGA GAATATGTTG CTTGACAAC AACTGGATGA    180
TGCCCAACAC AAGGCTGACA ATAAAGAGAA GACAGTGATT AATATCCAAG ACCAGTTTCA    240
TGCTATTGTG CAAAACTTC AAGCTGAGAG TGAAAAGCAA AGTCTTCTGC TAGAAGAAAG    300
AAATAAGGAG TTAATCAGTG AATGTAATCA CTAAAAGAA AGACAGTATC AATATGAAAA    360
TCTCGAG                                367
```

(2) INFORMATION FOR SEQ ID NO:1179:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```
GAAACCGAAA GTCGAAATGT ACTCTGGGAG TCATGATGAT GATGATTTTA ACAAACTTCC      60
TAAAAAGCT AAAGGGAAAG CTCAAAAATC AAATAAGAAG TGGGATGGGT CAGAGGAGGA      120
TGAGGATAAC AGTAAAAAAA TTAAAGAGCG TTCAAGAATA AATTCTTCTG GTGAAAGTGG      180
TGATGAATCA GATGAATTTT TGCAATCTAG AAAAGGACAG AAAAAAATC AGAAAAACAA      240
GCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```
GAATTCGGCC TTCATGGCCT ACGAGTTCTT CATGCTTGTT GTTGAGATT GAGATGTTTA      60
TTGGTAACAT TGTCTTTTTT CCATCCTTTT TTTTCTTCC TAACCTGGTT TCTTCCAGTG      120
CAACTGCAGA TAGAAGACCT GACCTCGAG                                         149
```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```
GAATTCGGCC TTCATGGCCT AGAAAATTAA ACTGTTTTTT AAACCAGGTG TTCACITTTTC      60
ATTGATTTTT GCATAGTACT TGGTGAACCC TATTGATTTT TAGATTCAGG TAATTTTCA      120
GTGTGAAAGA GTTTTTCTGT TATATCTTCA CTGTGATATC CATTCCATTC CCTTCTCAGT      180
TAATACTCAG TTAGCTCTA GTATCTGTCT CTCAAATTAT GTTTAATTGC TTTTATCACT      240
TTGTCCTCGA G                                         251
```

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCTAGA CCTGCCTAGA GTGCTCTGTG TATGCGGATG ATTTAGAATT GTCATTTCTC	60
TTTACTGGAT GTTTATTTAT AAAGATCTGG CCTGTTCTTG CGTCTGCGGA GCGGCCCTTG	120
TCTCCAGCT ATCTATAACC TTAGCTAGAG TGTCGCCTTG TGGGTTCCCT CTCGAG	176

(2) INFORMATION FOR SEQ ID NO:1183:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 410 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTTAGAA TTCTTGACGG GTTCTCGGGG GTTCCTGTTG TATAAAGGCC TTCATTACTT	60
TAGTTATACC CAAGTGAAAG GGGCATTAC CTCGTGACAA GTGGATTATA GGAGAAAAAG	120
AGGAGATGGT AGGTCAGAGT GTGCTTAGAA GTCATGCCCA GTGTTCTCAT CAATGCCAGA	180
CATTACGGGC TGCCCTTCCA TCAGCCATTC TACCTTTCTT CCTGCTAACA ATATCCCAAT	240
TTTGTTCAGG TATCAGGCCA CTTAATATGT TTCAGGGAAA ACTGGTTCCA GCCCAGAGCA	300
GTGTGGACCT TGATTACATC AACTAATCA TGGTGAGTCC ATTTTCCTTG CCAGAAATTC	360
GTTTAGGAGT GGACATGTAT TTCACTTGTG AGTACACAAG ACGACTCGAG	410

(2) INFORMATION FOR SEQ ID NO:1184:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GGAAACAGAC AGTACCAAGG AAGAAGCAGC TAAGATGGAA AAGGAATATG GAAGCTTGAA	60
GGATTCCACA AAAGATGATA ACTCCAACCC AGGAGGAAAG ACAGATGAAC CCAAAGGAAA	120
AACAGAAGCC TATTTGGAAG CCATCAGAAA AAATATTGAA TGGTTGAAGA AACATGACAA	180
AAAGGGAAT AAAGAAGATT ATGACCTTTC AAAGATGAGA GACTTCATCA ATAAACAAGC	240
TGATGCTTAT GTGAGAAAAG GCATCCTTGA CAAGGAAGGG CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1185:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GCGATTGAAT TCTAGACCTG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG	60
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGATTGTG	120
TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG	180
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCCTGTG	240

TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCTCTG	300
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCTTG	360
TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACTCGAG	417

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GGAAGGGGCT TTTACAACTT CCTTTTGTTC CCAGGCGTTA GTATCTCTGC TTGGTATAAG	60
ATACCAAGTAT TCCTAGGAAA GGCCTTGAAA AGAGGGGACAG ATACAAGCCT CTCTGAAAA	120
ATCTATGCTT TTCTTACCTC TACCAAGTAA TAGCAAACAT GAAAATGGTA AAGATCTTTA	180
CAACATTTGT CTCTGTACAT ATAAAACGTT TAAACACATG CGCAAAGATG GAGCAAAATA	240
TCATAGAAAA TAATCTCGAG	260

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC TTCATGGCCT ACAAGGAAAT GCCAAGGAA AAACGTGAGC TTCAGTTTCG	60
GCGAAAGGTC TTAGCAGTCA CAGACTCACC TGCCAGGAAG GGCAAGGACT CTCCCTCTAA	120
GCAGAGCCCT GGGGAGTCCA CGAAGAAGCA GGATGGCCTA GTCCAGATTG CACCAAACTT	180
GACTGTGATC CAGTTTATTA AAGTCTTCCC CAGGGTGCTG CTGCAGACCC TACGCCACCC	240
CATCTTCCTG CTGGTGGTCC TGTCCAGGT ATGCTTGCTA TCCATGGCTG CGGGCATGGC	300
CACCTTCCTG CCCAAGTTCC TGGAGCGCCA GCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCCT TCATGGCCTA CGAGGCGTCA CTGATCTTAA CGAGACTTCC AAATCGTCTC	60
AGCAGGGGCT CCAGACTTCC CCAGCAGGCG GCAGGTTTCC TGTCATGCTT TCGCCTTCCT	120
TCTCATATAC ACCAGTGCTA GAGTTCATCA TGTGTCAAAA TTGTATCTTG CTCTTGTTT	180
TCAAGATGAT CTAATAGTTG TCTTATCTCA GCATCATACT CCACCCATTC TGGGACAATT	240
CTGGCAGCAG CTTTGTAGTTT GGATTCTTTT GTTTGGGAT TATTGCACAG ATCAATTGTT	300
TTGGCCCTCC TTGGACTAAC CACATACAAA TATGAATCTG GCTGCAAGAA CAGGATATCC	360

AGGTAAC TAG AGAGTGGGCA TTGATAAAAA TATCTGGTGG AGAAGCCTAG GATTTCAACT 420
 TTTTGT CAGA GGATTCCTGT TGGGACAGCT TTACCAGAAA AGAATAATAG CGGATATGTT 480
 CATCCAACT AAGAACTTTC ATGCATCTTG CATTGTTACA TAGCCTGTGG ACTCGAG 537

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC TTCGTGGCCT AATTGAATTC TAGACCTGCC TCGAGGATTC AATTAGGCCA 60
 TCGAG 65

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCT TCATGGCCTA ACTTTATGTC ATAAAACTGA TTAAATAAT CTGAAATGG 60
 CCATTAAGGA AGATCAGATT GCAGATAACT TTCAAGGAAT ATCAGGTCCT AAAGAAGACA 120
 GCACAAGTAT AAAAGGTAAT TCAGACCAGG ATTCTTTTCT TCATGAGAAT TCGTTACACC 180
 AAGAAGAGAG TCAAAAAGAA AATATGCCTT GTGGGGAAAC AGCAGAATTT AAACAAAAGC 240
 AAAGTGTTAA CAAAGGAAAA CAAGGAAAGG AGCAAAATCA GGA CTCACAG ACAGAGGCAG 300
 AAGAGCTACG CAAACTTTGG AAAACCCATA CTATGCAACA AACTAAACAG CAAAGGGAAA 360
 ATATTCAACA AGTGTCACAA AAAGAAGCTA AACTCGAG 398

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGCCATTGTT TATACATTAT TGCTGTCACT ATTCACCAAG 60
 ATGGTGCTAT TACCTGTTGT GGGGCAATTT TCCTTGTCAT TTCTACATAT CTGGGAACAG 120
 CTTTGTCTT TATATTTTCA AGAATGTCTT AAAGCAGACA GCCTTGGAGG AGAGACAGAT 180
 AGTGACTCCC TCCAGGGAAA AAGTCGGATT TGTGTGCTCC CCTGCCTCGA G 231

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```
GAATTCGGCC TTCATGGCCT AACTAACC GAGCATGGCG GATCTGAAGC ACAGCAGCTT      60
GCGGTACGAG CTCCGAGCAG ATCTGGAGGA AGAAAGAATG CGGCAGAAAA TAGCAGAAAAG    120
GACCTCAGAA GAAACAATAC GCATTTACTC TTTGAGACTG TTTTGAAGT GTATTGTTCT    180
GGCTGTTTTA GGGGCATGCT TTTATGCAAT ATACGTAGCA ACTGTCTTCT CGCAAGAGCA    240
CATGAAAAAG GAAATCCTCG AG                                     262
```

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```
GAATTCGGCC TTCATGGCCT AGAGGAAATT GCTAATGTAA CAGAGACATC AGATCCAGAA      60
TTCCAACGAA CCTGAATGAG CCCTGGTGTG GAACAGCCGT GAGCCTGTCC ACGTTTTTCT    120
CCTGATCTCT GCTTTTCATT AGTAATGAAT TTCCACTCCT TCTCCCTTT CATGACAAAT    180
CAGTACAGTG AATGTAATTG CCACATCCAG CGATGCATCA TCTTCCCACT TTTCTAGGCT    240
GCAGAGAAGG AAGCAGCCCT TGTGCAGCAA GAAGAAGAAA AGGCTGAACA ACGGAAAAGA    300
GCTCGGGCTG AGAAGAAAGC GTTAAAAAAG AAGAAAAGA TCAGAGGCC CAGAGAAGCGC    360
GGAGCAGATG ATGGACTCGA G                                     381
```

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```
GCGATTGAAT TCTAGACCTG CCTCTCTTAC CCTTGGCTTA CTAATATATT CTTAGTGGCA      60
TTTCATTTGG TGGTACTGGT GCGCATTC AACAGGACAC TTGTATCTGA GTGAGCAGCT    120
GGAGCAGTAA GAATGACAAC ACTTGGTCTC TGCAGATTGG CTGGACCCAC CACTCTGGTG    180
CTAGTGCTGG CTTGGTGGCT GAGGGAACAA GCAGGAAGTA GAAGAGGAAA TGAGATGTGG    240
GTGGAGTGGG AAGAGAGGAC AGATTGGGGA GGGGAGGGAA AGTGCAAAC TCGAG      294
```

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```
GCGATTGAAG TCATTGCCAC GCCTACTAGT TTGCACTAAA GGAAAGTCAG TTTGGTATGA      60
ATTACAATGG CCAACGTTAC ATTCTCCTCC GTTTTGTTTT TTTTITTTAA TCTCAATTC      120
TCTTACTTTT CTTATTCCCC CTATGCTGAT GCCAATCAGT TTCTTTTGGG AAAGTTTTAA      180
CAGATCGGTT TTATGTTTTG AAGTACAGCA AGTATTTTCT CCTCTCTTTA AAATACAAAA      240
CCCAGAAACC CAGGAGCTCG AG                                     262
```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```
GAATTCGGCT TCATGGCCTA GACCGTCTCA AAGAAAACAC ATATACCTTT TGCTCAGATT      60
ATTGTTAAAT TTTACCTCAT TTAATTATC AATTGCTCTT TCTCTATTTA TGTGTATCAG      120
ATTATTGTTA AATGTTACCT TATTGCCTT ATCAATTGCT CTCTTTATGT ATGTTTGTGT      180
GTACTGTTGC ACATGCAAAT GCACACAAAT ATATGTTTCT GAATTTTTTG AGAGTAGATT      240
GCATACATTA TGGGACCTGC CTCGAG                                     266
```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```
GAATTCGGCC TTCATGGCCT AAGAAACACT TTAAAAATC TTTCCTAGT TATTTGTAC      60
ATAGATAAGA TAGTTGATTC CCAGCTTTTA TCTGTAAAGT TGTCATAATT GGAATTAAC      120
TCGGTGATTC TGTGTATAA AACATTGTTA TATTTTtagg TGTGTGCGGA TTTTAGGCAA      180
ACAAGAAAAT ATTAGAGTGA TGCAATTGGC TTTGTTCCAG GGGATGCTCG AG          232
```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

GACCTTTACC	ACTAAGTGGG	GCCAACTTTA	GCACCTTGCT	AATGAATCTG	GGTCCTGAGA	60
ATTGTGCAAC	ACTGCTGCTC	TTTGTTTTAC	TTGAGAGTAA	AATTCTGCTG	CATTCTCTTA	120
GGCCAGCTGT	CTTGACTGGG	GTAGCTGAAG	CTGTTGTAGC	TATGATCTTT	CCATTTTCAGT	180
GGCAATGCCC	ATATATTCCC	CTTTGTCTC	TTTCACTGGC	TGCAGTGCTT	AGTGCACCTT	240
TACCATTAT	AGTTGGAGTT	GACTCAAGGT	ATTTTGATCT	TCATGACCCA	CCAAGGCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

GCCACTGCTC	CTGGCCAGGA	CTCTCTTATT	AGGTTTGACA	TTTCAAGAGT	TTAGAAATTA	60
CCTTCCAGAA	TTACAGGTA	AAAGCCAGAC	CTCTCCTTGG	TGAAGATACA	ATTCTTTACA	120
ATTTTACAAT	AGTTAAGTAT	ATTTTATCAG	TCTATATTGG	CTGTTTAGTT	GACAAACCGT	180
TAAAAATTGG	TGACAGTCCA	GATGTGGTCA	CTCATGCCTC	TAATCCTCGA	G	231

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

GAATTCTAGG	CCTGACCCAG	CCCCCATGGC	TTCAGAAGAG	CTACAGAAAG	ATCTAGAAGA	60
GGTAAAGGTG	TTGCTGGAAA	AGGCTACTAG	GAAAAGAGTA	CGTGATGCCC	TTACAGCTGA	120
AAAATCCAAG	ATTGAGACAG	AAATCAAGAA	CAAGATGCAA	CAGAAATCAC	AGAAGAAAGC	180
AGAACTTCTT	GATAATGAAA	AACCAGCTGC	TGTGGTTGCT	CCCATCACTC	TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

GAATGAGAGG	TCAGAGTATT	CCATTGCACA	CGCACCCTGG	GGCTGACAGA	CTTGTGCCCC	60
CTAGCCTTCA	TGCATGCCCC	AGCACTGGCA	GCTTTCAGC	CCCTGCCCCA	CGACTCGAG	119

(2) INFORMATION FOR SEQ ID NO:1202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```
GATTGAATTC TAGACCTGCC TCGAGATTCT TTGAGCACTT TCCCCCATCC CCAGGGCCAC      60
AGATCCCCCTT CCTTACTTGT TGGGGGGAGG TCTGGAGCAC CTCGCCAATG CCCTTCCCCC      120
ATCCGGCTGG GTCCTTCCAG TTATTTATT GTGTATTAT TTATTTATCT ATTTATTATT      180
CTATTTAATC TCTTGGCCTC ACCCAGGGAC CGTCTGGCTT CCCCAGCTGG ACTGGGAGGT      240
CAGGAAGCCA GGCAAGGAGA GGGACAGCAC AGGCCACAGA GGGCTGCCCC CACCACACAC      300
ACCCCCGCGT CTCGGGAGAA ACCCACCCTC TTCAGAGCCT GCACTCGCTA AGGAAGGGGA      360
CTCGAG                                         366
```

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```
GGTGAGATGG AAAAGGAGTT TCCTGAGCTT ATCCGAAGTG TTGGTTTACT TACGGTAGCT      60
GCTGACTCTA TCTCTACCAA TGGCAGTGAA GCAGTTACTG AGGAGGTATC TCAAGTATCT      120
CTCTCAGTAG ACGACAAAGG TGGATGTGAG GAAGACAATG CTCTGCAGT CGAAGAGCAA      180
CCAGGCTTAA CACTGGGGGT GTCATCATCT TCAGGAGAAG CTCTGACAAA TGCTGTTCAA      240
CCCTCCTCTG AGACTGTGCA GCAAGAATCC AGTTCCTCCT CCCATCATGA TGCAAAGAAT      300
CAGCAGCCTG TTCCTTGTGA AAATGCAACC CCCAAACTCG AG                                         342
```

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

```
GAATTGGGCT TCATGGCCTA CGTCTTTCTA ACTATCTATG GGGTGGAGCT GTTCTTGAAG      60
GTTGCCGGCC TGGGCCCTGT GGAGTACTTG TCTTCCGGAT GGAACCTGTT TGACTTCTCC      120
GTGACAGTGT TCGCCTTCCT GGGACTGCTG GCGCTGGCCC TCAACATGGA GCCCTTCTAT      180
TTCATCGTGG TCCTGCGCCC CCTCCAGCTG CTGAGGTTGT TTAAGTTGAA GGAGCGCTAC      240
CGCAACGTGC TGGACACCAT GTTCGAGCTG CTGCCCCGGA TGGCCAGCCT GGGCCTCACC      300
CTGCTCATCT TTTACTACTC CTTGCCCATC GTGGGCATGG AGTTCCTCTG CGGGATCGTC      360
TTCCCCAACT GCTGCAACAC GAGTACAGTG GCAGATGCCT ACCGCTGGCG CAACCACACC      420
GTGGGCAACA GGACCGTGGT GGAGGAAGGC TACTATTATC TCAATAATTT TGACAACATC      480
CTCAACAGCT TTGTGACCTT GTTTGAGCTC ACAGTTGTCA ACAACTGGTA CATCATCATG      540
GAAGGCGTCA CCTCTCAGAC CTCCCACTGG AGCCGCTCT ACTTCATGAC CTTTACATT      600
GTGACCATGG TGGTGATGAC GATCATGTG GCCTTTATCC TCGAG                                         645
```

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

```

GAATTCGGCC TTCATGGCCT ACAGTACACA AGTGCTAGCC CTAGCAGCTC GCGATGTGCT      60
TCAGCAGAGC AGACGCTGCG GATAACTACC CTTTGGAAAC ATGTCAACAG AGGAAACTTT      120
TTCCTCACTT CCATCCCCCG AATTGATTG GGAACAAGTT TGTCCCTCTT AGGGGATCAC      180
CCCACAGAGG GCCTGGGTGT TATTTTTCAG ATGGATATGG CTTGGCATAC GACTTATCTA      240
AGATCCCAAC CAGTATAAAA GGATATACTT TGGGAGCCAG AACAGCTGTG AGGTTTAAGC      300
CAATACAGAA GGAAATGACA CCTCATGCAG GCAGGT      336

```

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

```

GGAAAATCTG AACAAACAAC CGAATAAGCA GTGGAAGAAA TCACAAACAT CTACAAATCC      60
AAAAGCTGCT CTCAAGTCTA AGATAGTGC TGAATTCGA TCTCAGGCC TAATTGAAGA      120
GCTGTTGCTA TACAAGCGCT CAGAAGATCA GATAGAACTG AAGGAAAAGC AGTTGTCAAC      180
TATGAGGGTG GATGTGTGCA GCACAGAAAC TCTCAAATGC TTAAAAGATA AAACAGGTGG      240
GAAGAAGTTC TCCAAAGAAT TTGAAGAGGC AAGCTCCAAG CTGGAAGAAT TTGTGAATGG      300
ATCACTCGA      309

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAATTCGGCC TTCATGGCCT ACAGCTTTTG AGCGGAAACC TGAAAGAAGG TTTGCAGTAT      60
CTTCAGAGTC TGAATTTTGA GCGGATAGTG ATGAGCCAGC TAAATCCCCT GAAGATTGTC      120
CTGCCCTCAG TGGTTAACTT TTTTGCTGCA ATCACAAATA AGTACCAGCT CGTCTTCTGC      180
TACACCATCA TTGAGAGGAA CAATCGCCAG ATGCTGCCAG TCATTAGGAG TACCGCTGGA      240
GGAGACTCAG TGCAGATCTG CACAAACCCG CTGGACACCT TCTTCCCTT TGATCCCTGT      300
GTGCTGAAGA GGTAGGTACT TTAAACGTT GACATCTCGA G      341

```

(2) INFORMATION FOR SEQ ID NO:1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GAATTCGGCC	TTCATGGCCT	ANCGAGCGGC	AGGTGTGCAC	AGAGGTNCTC	CACTTTGTNT	60
TCTGAACTCG	CGGTCAGGAT	GGTTTCTCT	GTGAGGCAGT	GTGGCCATGT	TGGCAGAACT	120
GAAGAAGTTT	TACTGACGTT	CAAGATATTC	CTTGTCATCA	TTTGTCTTCA	TGTCNTNCTG	180
GTAACATCCC	TGGAAGAAGA	TACTGATAAT	TCCAGTTTGT	CACCACCACC	TGCTAAATTA	240
TCTGTTGTCA	GTTTTGCCCC	CTCTCCAAT	GGTACTCCAG	AGGTTGAAAC	AACAAGCCTC	300
AATGATGTTA	CTTTAAGCTT	ACTCCCTTCA	AACGAAACAG	AAAAAATAA	AATCACTATA	360
GTAAAAACCT	TCAATGCATC	AGGCGTCAAA	CCCCAGAGAA	ATATCTGCAA	TTTGTCACTT	420
ATTTGCAATG	ACTCAGCATT	TTTGTAGAGT	GAGATCATGT	TTCAATATGA	TAAAGAAAGC	480
ACTGTTCCCC	AGAATCAACA	TATAACGAAT	GGCACCTTAA	CTGGAGTCCT	GTCTCTAAGT	540
GAATTAAAAC	GCTCAGAGCT	CAACAAAACC	CTGCAAAACC	TACTCGAG		588

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTCGGCC	TTCATGGCCT	ACAAGGATAG	AATTCATTCC	ACCTATATGT	ACTTAGCAGG	60
GAGTATTGGT	TTAACAGCTT	TGTCTGCCAT	AGCAATCAGC	AGAACGCCCTG	TTCTCATGAA	120
CTTCATGATG	AGAGGCTCTT	GGGTGACAA	TGGTGTGACC	TTTGCAGCCA	TGGTTGGAGC	180
TGGAATGCTG	GTACGATCAA	TACCATATGA	CCAGAGCCCA	GGCCCAAAGC	ATCTTGCTTG	240
GTTGCTACAT	TCTGGTGTGA	TGGGTGCAGT	GGTGGCTCCT	CTGACAATAT	TAGGGGGTCC	300
TCTTCTCATC	AGAGCTGCAT	GGTACACAGC	TGGCATTGTG	GGAGGCCTCT	CCACTGTGGC	360
CATGTGTGCG	CCCAGTGAAA	AGTTTCTGAA	CATGGGTGCA	CCCCAGGGAG	TGCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

GAATTCGGCC	TTCATGGCCT	AGGTGCAAC	TGCCACGCAG	CAACTGCCAC	GCAGAAAAAG	60
GAGGGGTTGA	AAAGGGAGTA	GCTTCTGATA	TTGAGAAGCT	ATTGGAAGAG	ATGCTCAAAG	120
AAGAAAAAAT	TACCATAATC	CAATAAAGAA	GAAGACCTGA	GATCCAGGAA	GCAGATGATC	180
TGAACTGCAG	AGAAAGTTCA	GGAAAGTTCC	CTCATTCATG	ATGATGGGAA	ATAACAGTAA	240
ATTCTGTACA	GCAGTCTTGG	ACAACAACCA	ATCTAAACTG	GCACAGTGCA	GAGGCAATCA	300
ACAGAGAACA	TAATATTGAT	AGAATGCCTG	ACGCTTTTGA	TTGTATTAC	AGGAAACATA	360

AACAATTGGA AAACCTCGAG

379

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

GAATTCGGCC TTCATGGCCT AGAAACAGGG TATTATTTAT CCTCTTAGCA TATGTTTTGT	60
AATGATTCTG TTACATCAGA GCTTCTGTTG ATGAGTGCCA CTAAAGTGAG ATTGTTGATG	120
AGGATTGGCC TTATTTTTTT GTGGTTCTAT TCAATACTTG CCACAGCATT TATTTTCTAA	180
AACATTTCTA CGGTCTATAC TTATCAGTGT CTGATCACAT GCAGGCACTG GTCAAGGTGG	240
AGCATGGTCC AGGCGTTCTT ACTGATACAA ACTCGTGCCT TCTCTTGAC ACAAGGAGCC	300
CATGTTCTGG TTAACCTCTG GTTCATTTAT TTCACTTGTC ATGCATCGCC TCTATCTTCT	360
CCCTTTATTG CGTCCTCGAG	380

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

GAATTCGGCC TTCATGGCCT AGTGAAGGGT ATTGGTGGTG TTTTTTCCCC TTTACCTCTC	60
ATTTGGGCAT TTAAAAATAG GAGGCCAACT TCATTTACTC CTGTTTAGTA AATCTAAATG	120
AGTGTAGGTT TTAAATTAGA TTTTTCCTCA AAACCCCTCA GAAGGTCTAG TATTAGGCA	180
GTTGATAAGT AAGTGAAGC ACCTGGGGCA GGACCCAGTG ACCTGTCCTT TTACTTATTA	240
CAGCACCTGC ACGGGAAGCA GATCTGGAGG ATGAAATTTA ACCTGTTACA GTGTGTGTAT	300
GTTTTAGGGT GTGTGTTTTT CGAATACTGT GGGGAGTTCC CTTTTCTCTT CTCCCATGAT	360
GGATTCTTTT GTCTTTCTAG AGATACCATA GGAGGATATC TGGATTTTTT ACCTAAGGCA	420
GTGTCTCGAG	430

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

CTCGAGTCTC TCCTGTTAAT CTCCTATTTA TAAAAGGATC ATGAGGCTGC CAAGTGCTAA	60
AAATGGAGAT GGTCTAGTAA CTAGAAAACCT CCCCACCCCA GGGAGCACAC CTACGTATGT	120
CCCTACAACC TAATAATGTG ATGTGTTTTG GAACACAGAC ATTAGAATT CATGAAGTTT	180
TAACGTGTTGA TTCTTTCCCA AGCATCATCA AGTTATGATT TAGGCAATGT ATGATTGAAA	240

TGCATTTCATT CATCACGCAT AGGCACAATC ACAGAAATAT TGCACAAAAT ATGTCCTCTGA	300
CTGAAACTGA GAGGTACAAA AACGTATTTC ACTCTTCGTA AAGAAGTTTG TGAGGAAATA	360
CAACTCTGCG ATCGTATAGA CATGTTTCCT GATAATACAC TGACATTACAC AAACAGTAGG	420
CCATGAAGGC CGAATTC	437

(2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC TTCATGGCCT AAAAAGAAAT GATGTTTCT CTCCAACAGT GTGTTTTAT	60
TTCTTTCATC TACCTGTCCA GTAATCATTT TAAAAAGAA AATAGCATTG GTTACTGCCT	120
GTGTGATGTG GCCCCGGCTT ATCTGCACTC TCCCTCCTGT TTAAGTTTCC AGCCACCTCA	180
GCTTTTCTC TGTTCTCTA GCATGGCAAG CTTATTCTG CCTCATGACT CTTTCGCATG	240
GTGTTTTCAG ATTTTCTCTG TAGCACTCTG CACGCATTGT CCACCTAAAC TCGAG	295

(2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GACCTGCCGC GAGTGTGTT GATAGCTTGC TCAAGATCAC ACAGCTAGTA GGTAAGGAG	60
CTAGGATTGA GACTTAAGTA GTTGGTTGTA GAGTCCACGT GTTTAACCAT TACACTACTT	120
TGATAACAAT ATCATTATTA TTATTATCTT TTTTTTTTTT TTGATACAAA GTCTCACTTT	180
GTGCCCCAGG CTGGAGTGCA GTGGCATAAT CATGGCTCAC TGCAGCCTCG AACTCCTGGG	240
CTCAAGGGAT CCCCCACTC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GAATTCGGCC TTCATGGCCT AAAAGAAGGA GCGCGAGAGA AAAAAGCGAG ATGAAGAAAA	60
AGCGAAACTG CGGAAGCTGA AAGAAAAAGA AGAGTTAGAA ACAGGTAAAA AGGATCAGAG	120
TAAACAAAAG GAATCTCAAA GGAAATTGA AGAAGAAACT GTAAAAATCCA AAGTGACTGT	180
TGATACTGGA GTAATTCTCT CCTCTGAAGA GAAAGCAGAG ACTCCACAG CTGCAGAAGA	240
TGACAATGAA GGAGACAAA AGAAGAAAGA TAAGAAGAAA AAGAAAGGAG AAAAGGAAGA	300
AAAAGAGAAA GAGAAGAAA AAGGACCTAG CAATGCCACT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCAATGGCCT AGCCATTATT AAGACCTGTG ACAAAAACTA TAGACATGAT      60
GCAGTGAAGA TTCTGAAACT CAAGCCTGTG CTGCAGAGAA GTCTCACTCA CCCTCCTACC      120
ATAGCCCCAG AGGGGTCCAG ACCCCAGGGT GGTTCGCCA GCAGCAAGCT AGACAGTGGA      180
TTTGCCAAGA CATCTGTTGC TGCTTCTCTA TACCACACAC CCTCTGACTC CAAGGAAATT      240
ACTCTTACTG TTACTTCAAA GGACCCTGAA AGACCTCCTG TTCATGACCA ACTTCAGGAC      300
CCACGACTGC TGAAGAGGAT GGCATTGAG GTCAAAGGAG GAATATTCCT TTGGGATCCA      360
CAACCCTCGA G                                     371

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(2) INFORMATION FOR SEQ ID NO:1218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCTAGA CTCCCGCGCG TACTCGGCGG CCTGAGCGAT ACTAAATGT CTGATGATGC      60
TGGTGACACC TTAGCCACTG GAGACAAAGC AGAAGTTACT GAGATGCCTA ATAGTGATTC      120
TTTACCTGAG GATGCAGAAG TGCATTGTGA TTCAGCTGCA GTTTCACATG AGCCAAACACC      180
AGCTGACCCC AGAGGGGAGG GGCATGAAAA TGCAGCTGTG CAGGGTGAGG GGGCTGCCGC      240
CATTGGGCCC CCTGTGCAGC CTCAGGATGC CAACGCCCTG GAGCCCCCTC TCAATGGAGA      300
CGTGACTGAG GATACACTTG CTGAATGTAT TGATTCCTGG AGCCTCGAG                                     349

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(2) INFORMATION FOR SEQ ID NO:1219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```

GAATTCTAGA CCTGCCTCTC CTGTCACTTC CTTGTGTTTT CTCTGTGACC GGCCTCTGTT      60
CCCACCACCC TTTTGGAAC TGTGTCCTGA TGGTCACCAG TGCTTTCTTA ATAGCCAAAT      120
TCAGTGGCCT GTCCTCAAGC TCCCCCGAAT TCTTTGGCCA CACAGATCAA CCTCTAAGTC      180
CTGGGAACCT CCTCCTTTGT GATTTGAGG CGCTGTGTGC TGCAGGCTCT GCTTTTCCTT      240
CCCATCACCC CATGGTTCTT CCTTCTCTC TGACCCCTCC CTCTTCATT TCTCCACAG      300
CTCTGTCCAC AGCCACAATG TCCATAGGAG CCTGCCACAC CCTTTATCCA ACTGCAGCCT      360
CAACCCACCT GCAAAGGACC CCTGAACCTG AG                                     392

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(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```

GCAAGCTACT TCTTCAACAG CTGTATCTGC TTCAAAGCCG ACTGCCTCTC CTCAAGCAT      60
TGCAGCAAAC AATTGTACTG TGAATACGTC ATCAATTGCA ACGTCTTCAA TGAAGGGTCT      120
TACGACTACA GGAACTCGT CTCTTAATAG CACATCTAAC ACTAAAGTAT CAGCAGTGCC      180
TACAAATATG GCTGCCAAGA AAAACATCTA CCCCCAAAT AAATTTTGTT GGTGGTAATA      240
AGCTGCAGTC NACAGGAAAT AAAGCAGGAG ACCTTAAAAG GGACCCGAAT GTGTTAAAAG      300
TAATCCTGTC ATTTCTGCTG TGCAGATTCC TGAAGTAAAG CAAGACACAG TGTCAGAACC      360
AGTCACACCT GCATCTCTTG CTGCTTTACA GAGTGATGTG CAGCCAGTGG GCCATGATTA      420
TGTGGAAGAG GTACGAAATG ATGAAGGAAA AGTAATTCGG TTCCATTGTA AATTATGCGA      480
GTGCAGCTTT AATGATCCCA ATGCTAAGGA GATGCACCTA AAAGGGCGAA GACACAGACT      540
TCAATATAAA AAAAAAGTAA ATCCAGATT TCAAGTAGAA GTAAAGCCAA TACTCGAG      598

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(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```

GAATTCGGCC TTCATGGCCT AGAGGAGTCC TGTCAGTTCG TTCTCTGCTG TGCCCCAAG      60
ACCATGAATC ATGGCTGGCA TGTAGTAGGC ATTTAATAAT ATATGTTCAA CAAGTATTTG      120
GCAGTCTTGG AGGGCAGAAA AGGAGGTGGG GAAGATTTT AAATAACATT TTTTAAAAAG      180
TCACATTGTC CTACAATACC GATTTTCTT GCATATTAG GAAATTGAGG GTTTTTTCT      240
AAAACATGCG GACATATGGG AAATAGGATG CAACATTGTC ACTAATGTTT CAGACACAGT      300
TAGAGGTTTC CAAGAGATT TGCCTGGGT CACTCGAG      338

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(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCTCGAGTGA CATGGAACT GAGGTCTTAG AGACACGTGT AATGGAGAGG AGAGGAATGG      60
AGACCTGTGC GATGGAAACC AGAGGGATGG AAGCAAGGGG CATGGATGCA AGAGGATTGG      120
AGATGAGGGG CCCTGTCCCC AGTTCAAGAG GCCCTATGAC TGGTGGAATT CAGGGTCTCTG      180
GTCCCATTA TATAGGGGCA GGTGGCCCTC CTCAGGGACC CAGACAGGTC CCAGGCATTT      240
CAGGGGTGGG GAATCCTGGA GCTGGTATGC AGGTACAGG CATACAAGGA ACAGGCATGC      300

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AGGGAGCAGG CATACAAGGA GGAAAAATGC TCGAG

335

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GAATTCGGCC TTCATGGCCT AGGTACAGAC TGAACCCAGG AACCCGGGTA TCTGCGTCTCT      60
GAGTCCCAGC GCCCACCAGG ACTGGGGCCT CCTCACATCT ACTCTGAGGA CAGAATCTAT      120
TGGCAGAGTC TTCCTTTTGT TTTGGGATGC TGGGTTTGAG AACATGCCGG GAACCAAGAG      180
TCGTGACTAA TCCAATTTTG AGCGCTTGAG GACCAAGTGG AAAGAAACTC AAGCAGATTT      240
AAAGTGACCA ATGTCTGGTT ATGCCCTTGA GCCCCTGCAG AAGCAAACAA TAATTTTGTG      300
TGTGTGTGGA CAAATACATT TGTATTCCAG ATCTCACAGA ATTTCTACA CAAAGAAATT      360
TGCAAGGAAA ATGGACATTG CACCCTAAAA ATTAACAAGG AAAGAAGGTA CCAGGAGCAA      420
CAACTCATTA ACAGGAACAG AAACAATATT GCAAATATTT CAGATGCAAA GTGTATCCGA      480
CTTATAATAC AACTGTCCCT ACTGTGTCTA AAGAAATGAA AGGCAATCCT CGAG      534

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(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

TCACGAATGG CCCACAGGGA TCAGGAATGG TATGATGCTG AAATTGCCAG AAAACTGCAA      60
GAAGAAGAAC TTTTGGCTAC CCAGGTGGAC ATGAGAGCCG CTCAAGTAGC TCAAGATGAA      120
GAAATCGCTC GACTTCTAAT GGCTGAAGAA AAGAAAGCTT ACAAAAAAGC CAAGGAGCGG      180
GAGAAATCAT CTTTGGACAA AAGAAAGCAA GACCCCGAGT GGAAGCCAAA AACAGCTAAA      240
GCAGCAAATT CCAAGTCAAA AGAGAGTGAT GAACCTCACC ATTCTAAGAA TGAAGGCCA      300
GCACGGCCAC CACCACCTAT CATGACAGAT GGTGAAGATG CGGATTCTCT CGAG      354

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(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```

GCAACAAAAC AAAACAAAAC ACACTTATGG TAACCCATTC TGTGAGGAG TCCAAAACCTC      60
GAATAAAGCG CCTCATTGCC TTTAACTGGT TCTGTGGCAG TGAGATCATC ATCCTTATGC      120
TGGCTCACCT AGTGTCTCTC TCTCTCTCCC GTTTTCTCTC TCCCTCTCTT ATCCCCTTGA      180
CTCTCCCCAC TTCTCATCTT CTCTTTAGAT TATGTGGTAG CTATCCTCAA GAGCTCATAG      240

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TGCCTGCCTG GATCACTGAC AAAGAACTGG AAAGTGTATC AAGTTTCAGG TCCTGGAAGC	300
GCAATCCCTGC CGTCATCTAC AGGCACCAGA GCAATGGAGC TGTCATTGCC CGCTG ² GGAC	360
AGCCAGAGGT TAGCTGGTGG GGCTGGCGAA ATGCAGATGA TGAGCATCTG GTACAGTCAG	420
TAGCCAAAGC TTGTGCCTCT GACTCCCGAT CGAGTGGCAG CAAGCTGTCA ACTAGGAAAC	480
GACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GATCCCCACC AAAACAGGAA AAGAAGTGCT CTCGTGCAGG GCTTGTTTAC AGTGAGCCTG	60
GCTGGCTCCT CATGATCTCT GAGTTTAAAA TGTGCCAGCA GATGATTTTA ACGATCCCAT	120
CAAAAATTGT TGTCTGGATC AGTTTCGAGC TAGCGTTTCC TTGCAGAGGC CATTCCTTCT	180
TTTTTGACAA AAGTTGGGTC GGCCAGGTGC AGTGGCTCAT ACTTGTGATC CACCTGCCTT	240
GGCCTCCCAA AGTGCGGGGA TTCTAGGCAT GAGCCACCAC ACCCTGCCAG AAAAATGGAT	300
TAAAAAGAG AATTACAAAG TACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT AAAATTTTAA AAAAATATTT ATAATGATAG TTAGAGAACT	60
GTTTATATGA GGATCAGACA TTGTTTCAGC ACTGGATCTC CTCTGTCCCC TCTCTTGCTA	120
CAGCATACAG CCCAGAGACA CACATGTAAA AGTAGATGAT CTCTGTAAAC TTCAGCTGCA	180
TTTCTGTATG TGTAGGATTG TCCTANTATC AGATATCCTT TGAGAAAGAG TTGGAGAGGC	240
ATGGAAGGAA GCATATTCCT GACCTCCCCC CTTTTAGCT AAAGATACAA ATTCAGAGCT	300
GTTTGAAAAG GGCTTAGAAT AATATTAATT AAACATATTC TATAATACAA AGAGAAGTAC	360
TTTTTTAAAA TACATTATTT TTTCTTCTT TTTTAGCAGG CATTTCTGAC AGAAAATCTT	420
TAGGGCCAAT TAGAGTTTCT TTCTGACTTT TAATTGCCCT CTGCCTTTTG GGAAAGTGTT	480
GGAAAAAGCT CTGGAAAAAA ATATGCTGGT CAAGGTCGCA ACTCGAG	527

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC	TTCATGGCCT	AAGAAAACAG	CCTAGAATTA	AACCTCCAAG	ATGAGTGTGA	60
GATGAAGCCT	TTCCACCTAT	CCCAACAGG	TTTAAAAAAA	ATAAAAACTA	GAATGGGGCT	120
ACTACACAAC	AGCCCTTTGC	CCCACCCAAG	GCTCATTCCC	TAGAGGCAAG	TGTACGAGTT	180
TATTTCTCCT	TGAAATTATT	TCCATATCTC	CAAATAGTGT	TTATACCACT	CAAGGCAGAG	240
ATAGCAATTT	GCCTACCCAG	TATACATTTC	CCCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC	TTCATGGCCT	AGCCACCTTG	AAGCTCTCAA	ATATCACTGT	TGTGAATACA	60
GAGAGGGAAA	ACCAACTGTA	ACGTGCCACC	CAAATTTTTT	CAGATTAATA	CATCATTCAT	120
CAGACTTCAT	TCGTGATCTC	GAAGAGTGAC	ATCAGTCTTC	CTTGGAATAT	GAAGAGAATT	180
TCTTTGGTTC	TTCTTTTGCA	TTTCTATTG	ATTTATTTTA	TTTTATTTTA	TTTTATGTTT	240
TTTGGTACAG	AAAGCTCATT	ACTAGTCCTG	TCCAGCAACG	TGCCTCTCCT	GGCCCTAGAG	300
TTCTTGGA	TAGCCCAGGC	CAAAGAGAAG	GCCTTTCTCC	CCATGGTCAG	CCACACGTTT	360
CACATGCGCA	CAGAGGAGTC	TGATGCCTCA	CAGGAGGGCG	ATGACCTACC	CAAGTCCTCA	420
GCAAACACCA	GCCATCCCAA	GCAGGATGAC	AGCCCCAAGT	CCTCAGAAGA	AACCATCCAG	480
CCCAAGGAGG	GTGACATCCC	CAAGGCCCCA	GAAGAAACCA	TCCAATCCAA	GAAGGAGGAC	540
CTCCCCAAGT	CCTCGAAAAA	AGCCATCCAG	CCCAAAGAGA	GTAACATCCC	CAGAGCCCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC	TTCATGGCCT	ACCGGGCAGT	TAGGCCCAAG	CGCCGGGTTC	AGGCCTCCAA	60
AAACCCCTG	AAAATGCTGG	CGGCAAGAGA	AGATCTCCTT	CAGGAATACA	CTGAGCAGAG	120
ATTAAACGTT	GCCTTCATGG	AGTCAAAGCG	GATGAAAGTA	GAAAAGATGT	CTTCCAACCTC	180
CAACTTCTCA	GAAGTCACCC	TGGCGGGTTT	AGCCAGTAAA	GAAAACCTCA	GCAACGTCAG	240
CCTGCGGAGC	GTCAACCTGA	CGGAACAGAA	CTCTAACAAAC	AGCGCCGTGC	CCTACAAGAG	300
GCTGATGCTG	TTGCAGATTA	AAGGAAGAAG	ACATGTGCAG	ACCAGGGTGG	TGGAACCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC	TTCATGGCCT	AGTCCCTGTT	CAATTTCTCT	CAGCCTCAAT	ATCTTTTACT	60
TAAACTAGG	TAGGGTTACC	AGTTCAATGA	TCTGCTCATT	AAATACTTAC	TATACCTTAG	120
GTAATAATG	AGAAGCTAGG	AAAAGAGTGA	TGAAAAAGAC	ACACCTAGAG	AGGGCATTGG	180
ATTATTAAAT	CAGCAGCTAC	TGTAAAGGTA	TTTAAGTTCT	GTGACAGGCA	GCATTCTGGG	240
TATCACAGGA	ACATCTTACA	AGAATTTCTA	ACTTCAGGAG	GAGGGTTTCAG	AGAATTAGCC	300
AGGCCAGGGG	TGAGAGTGTT	CTTCCCGGAA	GAGGGAACAA	TGAAGACCCA	GGAGGAGATA	360
CAGAGTATCT	CGCTGTATTT	AAAATAACCA	GAAATAGATT	TATATATTTA	GTACAGAGGC	420
TGAGGGGAAG	AGAAGTGAGT	GTGAGAAGAT	CAAAAGGAGA	AGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC	TTCATGGCCT	ACAATCATCT	CAAACAGTTC	CGGGTTGCTG	CCCTTTTGGC	60
TTTCCTAGGT	GCTACAGTAG	CAGGCTGTTT	TCCCCTTTTC	CATAGAGGGG	AATATTCTGC	120
ATCACCCCTT	TGTTTGCCAT	TTCTACAGG	TGAAACGCCA	TCATTAGGAT	TCACTGTAAC	180
GTTAGTGCTA	TTAAACTCAC	TAGCATTTTT	ATTAATGGCC	GTTATCTACA	CTAAGGATA	240
CTGCAACTTG	GAAAAGAGG	ACCTCTCAGA	AAACTCACAA	TCTAGCATGA	TTAAGCATGT	300
CGCTTGGCTA	ATCTTCACCA	ATTGCATCTT	TTTCTGCCCT	GTGGCGTTTT	TTTCATTTCG	360
ACCATTGATC	ACTGCAATCT	CTATCAGCCC	CCCACTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC	TTCATGGCCT	AGGATATAGA	CCAAACCCAA	ATCCTGTTGG	ACAAGGGATT	60
AGACCACCTA	TGGCTGGATG	CAACAGTTCG	GTAGGCGGCA	TGAGTATGTC	GCCAAACCAA	120
GGCTTACAGA	TGCCGAGCAG	CAGGGCCTAT	GGCTTGGCAG	ACCCTAGCAC	CACAGGGCAG	180
ATGAGTGGAG	CTAGGTATGG	GGGTTCCAGT	AACATAGCTT	CATTGACCCC	TGGGCCAGGC	240
ATGCAATCAC	CATCTTCCTA	CCAGAACAAAC	AACATATGGG	TCAACATGAG	TAGCCCCCA	300
CATGGGAGTC	CTGGTCTTGC	CCCAAACCAG	CAGAAATATCA	TGATTCTCC	TCGTAATCGT	360
GGGAGTCCAA	AGATAGCCTC	ACATCAGTTT	TCTCCTGTTG	CAGGTCGCA	CTCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTCATGGCCT	ACGCCTCTTT	AACACATGGG	CCTTTGTGTG	GACACCATCT	60
TTCCCTGAAA	CCTGTCTGCA	TCTTTTCTGT	CCCTTCTAAC	CATCCAGTTT	GTTCTTCCCC	120
AAGATGGGCT	GCCACAAGTT	GCCATTTCCT	GA CTGGTGCA	TGGTTCCAGA	CAGCTCGCGG	180
GCAGACACAG	GGAAGGAATC	TTATCTCGTT	TTGTTTTTTT	TGTTGTTGTT	TTGTTTTTTT	240
TCTTTTTTGT	TGTGGTTGTT	GCTGTTGTTT	TGAAACGGAG	TCTCACTCTG	TTGCCAAGGC	300
TGGAGTGCAG	TGGCGCAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GAATTCGGCC	TTTATGGCCT	AAAAAAAAAA	AAAGAAAGAA	AGAAAATGTT	GGATATAGTA	60
GGTCTGAGCT	TTATGGAGAA	AGAAGGTTTG	AAGTAGCTTC	TGGGATATGG	AAAAAGAACT	120
TATGAGAGAA	ACAGACTTCT	GGGAATCCTT	CAAGGACTAG	AAGAGAACAT	AGATTATGAA	180
AGAATGAGTC	ATTGATCAGT	G TAGTTGTAG	ATTAGAATAG	TTGGACAGTT	AGGATTGTCT	240
AGGCAGAAGA	ATGGAGGAAG	TCACGGCCTA	GGGAGTTAAC	AGTGTTAGGA	GCAAGAGAGG	300
TTTAACTAA	TGAGCCATGG	AGTTTAAGCA	GAGACAATAG	AGAATAAAGT	AAAATAGGAA	360
GAAAAATTTA	AAAAGAAAGT	AGAAAAGTCC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	ACACAATTCC	AAAGAAGGTG	GTGTGCCACT	TCAGTGGGAA	60
GGCCTATGCC	GACGAGGAGC	GGTGGGACCT	TGACAGCTGC	ACCCACTGCT	ACTGCCTGCA	120
GGGCCAGACC	CTCTGCTCGA	CCGTCAGCTG	CCCCCTCTG	CCCTGTGTTG	AGCCCATCAA	180
CGTGGAAGGA	AGTTGCTGCC	CAATGTGTCC	AGAAATGTAT	GTCCCAGAAC	CAACCAATAT	240
ACCCATTGAG	AAGACAAACC	ATCGAGGAGA	GGTTGACCTG	GAGGTTCCCC	TGTGGCCAC	300
GCCTAGTGAA	AATGATATCG	TCCATCTCCC	TAGAGATATG	GGTCACCTCC	AGGTAGATTA	360
CAGAGATAAC	AGGCTGCACC	CAAGTGAAGA	TTCTTCACTG	GA CTCCATTG	CCTCAGTTGT	420
GGTCCCATTA	ATTATATGCC	TCTCTATTAT	AATAGCATTC	CTATTCATCA	ATCAGAAGAA	480
ACAGTGGATA	CCACTGCTTT	GCTGGTATCG	AACACCAACT	AAGCCTTCTT	CCTTAAATAA	540
TCAGCTAGTA	TCTGTGACGC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ACACTGAGAA	CGAGATGGCT	ATTTATGAAT	TCATTCATAA	60
CTTTGTGGAA	GTTTTAGATG	AGTATTTTCAG	CCGAGTGAGT	GAATTAGATG	TATCCTTTTT	120
CAATACTGTT	TTCCACAGTA	CTTGGCAAAT	GCACTCTGGT	CCTTATCAGG	TAAGTACCAC	180
AAGGCAGGAA	AACTATTCAG	CAGAGTCCAG	AGTGTTCATC	ACCAACAAC	ATGACAAGAC	240
AGCCAGAGGT	GTGTGTGTTT	TGCAGAACTC	CTCCCAACT	TCGTCACCCA	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

CTCGAGTGGG	GGGAGGGAGG	GGGAGGAGAG	AAGGGGAGGT	GGATGGGGGA	GGGGGACAGT	60
GGAGGAAGAG	GGAAGAGGGA	GAAAATAAGG	AGAAAGAGAA	GGAAAGGCAG	AAGGGGAGGG	120
GAAGGGGGAA	GGGAAGAAC	AAGGGGAATG	GGAAGAGAAT	GAAGAGGAAG	AGAAGAGGAA	180
GAGTAGGAGG	AGAAATAACA	AAAGGCACCA	GGTTGGAAG	GAAGAATTA	AAATATATT	240
ATTGCAAAC	GACATTATCC	TATAGTGAAA	AATCCTTAAA	AGTTAGGCCA	TGAAGCCGAA	300
TTC						303

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGCT	TCATGGCCTA	CTCTTCTCTG	AGACAGAAAA	CTAGCGAACC	CCAGGGGAAG	60
GTGCCGTGTG	GAGAGCACTT	TCGGATTCGG	CAGAATCTAC	CAGAGCACAC	CCAAGGCTGG	120
CTTGGGAGCA	AATGGCTCTG	GCTTCTTTTT	GTTGTGTGTC	CGTTGTGAT	ACTGCAGTGT	180
CAAAGAGACA	GTGAGAAGAA	TAAGGAGCAG	AGTCCTCCTG	GCCTTCGAGG	CGGCCAAGTT	240
CACTCTCCAT	TAAAGAAAAA	AAGAAATGCT	TCCCCCAACA	AAGACTGTGC	ATTCAATACC	300
TTAATGGAAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC TTCATGGCCT AAAATGACCT TGGTAAGAAT GGGTTTTTAC AATAAATGAA      60
TTTTTAATTC CAAGATGTTT TTTCATTGAA ATTACTGCCC CAGTTGCATT AAAAGTGTGG      120
CTGTGCAAAG CTTCTTTCTA CCAGGCTTCA TGTGCAGGAC CTGGGTTTTT GTTGCCTTGG      180
CAATTCCAAA AGCAGGTGTT GAAAGAGAAG AAGACAGGAA AAAGAAGATG GGAGAAAAAT      240
TTTCCAAATC AGAGTTCTCA GTCCAAGGAC TTATTCTTGG GGGTTCAAAA ATTCTAACAG      300
TATTTTTTAA TTGCCTCTAT TTCGATGGTT ACTTGATTAA ACTGTTCTAA CATTTCATAA      360
AATAAAAATT TGCAATGATA ACTTTTATAT CAGACTTTAC CTCTGTTTCC CAAATTGGAA      420
TCTTTAGGAA TATTTTTTTG AGATCACTTT TTTCTTTTTT TTCTTTAACA AAGATTGGGA      480
ACCGCTCTTA GGAACAGACA AATGGATTTC CATATTTCTT AAAGCGTTGA AGTAAATCTC      540
TGCCACCCTC GAG                                         553

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC TTCATGGCCT ACTCTTCTCA AGGCTTTGAA ATCTCCCCTT GCACTGAGAT      60
TAGTCGTGAG ATCTCTCCCC GTCTCCCTCC CAACTTATAC GACCTGATTT CCTTAGGACG      120
GAACCGCAGG CACCTGCGCC GGGCGTCTTA CTCCCGCTGC TTGTTCTGTC CCCTCCCTCG      180
GACCAAACAG TGCTCATGCT TCAGGACCTT GTTGTGCGAA GATGTTGGTT TCCCTTTCTC      240
TGTTATTTAT ATAAAAATAA TTTATCAAAA GGATATTTTA AAAAAGCTAG TCTGTCTTGA      300
AACTTGTTTA CCTTAAAAAT ATCAGAATCT CAGTGTTTGA AAGTACTGAA GCACAAACAT      360
ATATCATCTC TGTACCATTC TGTACTAAAG CACTTGAGTC TAATAAATAA AGAATCAGC      420
ACCCCTAGGC CATGAAG                                         437

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(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC TTCATGGCCT ACAAATATAT GTCTTTTGAA AACCNAGTCA AGTACCTAGA      60
GATGAAAACC ACAAATGAGA AACTGTTACA GGAATTAGAT ACACCTCAAC AACAATTGGA      120
TTCACAGAAC ATGAAAAAAG AGAGCCTGGA AGCAGAAATA GCTCACTCCC AGGTGAAACA      180
GGAGGCGGTA TTGTGCGATG AAAAAGTATA TGAGTTGGAG TCCCATCGAG ATCAAAATGAT      240
TGCAGAAGAC AAAAGCATAG GATCTCCAAT GGAAGAGAGA GAGAAATTAC TTAAGCAGAT      300
TAAAGATGAT AATCAGGAAA TAGCCAGCAT GGAAGACAG TTAACAGATA CAAAAGAAAA      360
GATAAATCAG TTTATTGAAG AAATTAGACA ACTTGACATG GATTTAGAGG AACACCAAGG      420
TGAAATGAAC CAGAAATACA AGGAGCTAAA GAAAAGGGAG GAACATATGG ACACCTTTAT      480
TGAGACTTTT GAGGAAACAA AGAATCAGGA ACCAAAACCTC GAG                                         523

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(2) INFORMATION FOR SEQ ID NO:1243:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	TTCATGGCCT	AACGTATTAC	AGGGAAAGAC	AAAAAGCAAA	AGGTGATTGA	60
AACATAGTTC	TAAATAACAA	GAAGGGAAGT	TTTCTTAAAC	TGATCATCTG	TCTTATTGTC	120
ATGACAAAGG	GTAAAAATTT	ATTTTCAGTC	CTTTAGTGCT	TTTTAATAAT	TCACCATACA	180
TATTTTACTT	ATATCCCAT	AACGTGGGA	CTTAGCACAG	TTTACATTTT	CAGTCATGTG	240
AATATAATTA	TCTGTATTCC	CTGTTGGACT	GATGGGGGAA	ATTGGATCAT	TATATAATTT	300
AAAAGACACC	TCCCCAGGCA	CCCATGTGT	TCTTAGGAAG	TCAGTGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1244:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCT	TCATGGCCTA	ATTCAGCTTT	ATCGTTCCTT	CTGGCAGTTC	AGTTGTTGGC	60
CCAGATTTAT	TAAGGTTCCA	CAGAAAGCAA	CTGAAATCTC	CCTTAGAAAT	AAAGTTCCTG	120
GTGTGAAGAA	AAAAAAGATC	CATAAAAGT	CTCATCCTTA	GGACAGCAAC	TTTTATAATG	180
CACAGCTGAT	CTGAATAGCT	CTCTGGATTG	TGGCCTTGGA	CAACAGTTCA	GACTGCATTA	240
TTGAGTATGA	ACCTTGAGCT	TTCTGAGTCT	CTTCTTTTGG	CTCTTTTACT	AGCAGACCCT	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:1245:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 591 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	TTCATGGCCT	AGGGTTTGGG	GGTTCTGAGA	TGTTACTCTC	ACTGAAGTCT	60
GTGTGGGAGG	CGGATTACTA	AACAAGAAAT	TGCTAATTAA	TCTCCAGATG	GCAAGGAATG	120
GATAAAGCAC	TGTTCCCAAC	AAGGTCCAAA	TGTCTCCGCT	GGAAGAGTGT	ACAATGGATG	180
CAGTTGGTCT	TCCTGCTGGC	AACAGTACCA	CCGAAGCGCT	TGGGGCAAGT	TCCAAATCCA	240
GTAACCTTCT	TTTATAATCT	TCTTTGGTAA	ATTCCCTCCT	GGGAAACATG	GTTGCTAACG	300
AAAAATTACC	GTAAGTGTG	CCAACAGTCT	GTGCAGCAAA	CTGCCTTGCC	TCTTCTAGAG	360
GAGCATCAGA	AGGGAACCTGA	TTTGTAAGG	AAGAACCATC	AGGAAGACGG	AATTGAATTC	420
TTGCAACAGT	GCTTCTTTCT	CTTGATAAG	ATTCCCTCTT	GACTTCCATT	TCTGCCTGTT	480
TTGCTAGCAA	GGCAGCAGCT	TTGGCAGCCT	CTACTTCTTC	CTTTGTCTTT	GCAAAACGAG	540
CAGCTCTCTC	TGCACGGTCC	AATGCAATCT	GCTGTTTTAT	ACGTTCTCGA	G	591

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 593 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```

GAATTCGGCC TTCATGGCCT ACTTCGGGGA AGAAACCTTC ACCAGAGTGG AGCAGTTCAG      60
ACCATGGAAC CTCTGATCCA AGCAGCCCAG CTCCTGCAAT TAAAGAAGAA AACCAGGAG      120
GACGCAGAGG CTATCTGCTC CCTGTGTACC TCCCTCAGCA CCCAGCAGAT TGTCAAAATT      180
TTAAACCTTT ATACTCCCCT GAATGAATTT GAAGAACGGG TAACAGTGGC CTTTATACGA      240
ACAATCCAGG CACAACCTACA AGAGCGGAAT GACCCTCAGC AACTGCTATT AGATGCCAAG      300
CACATGTTTC CTGTTTGTGTT TCCATTTAAT CCATCTTCTC TAACCATGGA CTCATCCAC      360
ATCCCAGCGT GTCTCAATCT GGAATTCCTC AATGAAGTCT GAAGATGCAT GTTTCAGCA      420
TTAGTTTGAT TCCCAATGTG AGCAAGAAGG AAGTATATAC AGTAAAGTAA ATTCAAGGAT      480
CTGTTAAATC TGGTAAAGT AGATCAAATC AGAGATTGAC AGCCTGTGGA GGGTGCTGAA      540
CTATACAGAA TTAGACACAA CTATGTCATT ATTTTGTGTA CCAACTACTC GAG      593

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(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```

GAATTCGGCC AAAGAGGCCT AAACCTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTG AACCTGAGTC CCTTCACCAT TACTGTGGTC TTACTTCTCA      120
GTGCCTGTTT TGTCAACAGT TCTCTTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGAAG TGAAAGTCCA NGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG      420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACCTCGAG      599

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(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```

GAATTCGGCC AAAGAGGCCT AACCGAATGG ATTATCTGTG GGAGTAACAT CTCAGAAGAC      60

```

TATGAAGCTA	ATTCCTGCCT	CAAGACACAG	AGCTACACAA	AAGGTGGTTA	TTGGAGATCA	120
TGATGGGGTA	GTTATGTGCT	TTGGCATGAA	GAAAGGAGAA	GCAGCAGCAG	TGTTCAAGAC	180
TTTACCCGGG	CCGAAGATTG	CAAGGCTGGA	ACTGGGAGGG	GTTATCAACA	CACCTCAGGA	240
GAAAATTTT	ATTGCTGCAG	CATCTGAGAT	TAGAGGCTTC	ACAAAAAGAG	GAAAACAGTT	300
CCTCTCCTTT	GAAACAAACC	TCAC TGAAAG	CATTAAAGCT	ATGTATGTCT	TTTGTCTCT	360
TTTGTATTTT	TACATACTTA	TTTATAATAT	TTTGGATAGA	TGTGAGGCAA	CCCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 800 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCGGCC	AAAGAGGCCT	AGCAGAGCAC	AGCATCGTCG	GGACCAGACT	CGTCTCAGGC	60
CAGTTGCAGC	CTTCTCAGCC	AAAGCCGAC	CAAGGAAAAC	TCAC TACCAT	GAGAATTGCA	120
GTGATTGCT	TTTGCCCTCT	AGGCATCACC	TGTGCCATAC	CAGTTAAACA	GGCTGATTCT	180
GGAAAGTTCTG	AGGAAAAGCA	GCTTTACAAC	AAATACCCAG	ATGCTGTGGC	CACATGGCTA	240
AACCCTGACC	CTTCTCAGAA	GCAGAATCTC	CTAGCCCCAC	AGACCCTTCC	AAGTAAGTCC	300
AACGAAAGCC	ATGACCACAT	GGATGATATG	GATGATGAAG	ATGATGATGA	CCATGTGGAC	360
AGCCAGGACT	CCATTGACTC	GAACGACTCT	GATGATGTAG	ATGACACTGA	TGATCTCACC	420
AGTCTGATGA	GTCTCACCAT	TCTGATGAAT	CTGATGAACT	GGTCACTGAT	TTTCCCACGG	480
ACCTGCCAGC	AACCGAAGTT	TTCACTCCAG	TTGTCCCCAC	AGTAGACACA	TATGATGGCC	540
GAGGTGATAG	TGTGGTTTAT	GGACTGAGGT	CAAAATCTAA	GAAGTTTCGC	AGACCTGACA	600
TCCAGTACCC	TGATGCTACA	GACGAGGACA	TCACCTCACA	CATGGAAAGC	GAGGAGTTGA	660
ATGGTGATA	CAAGGCCATC	CCCGTTGCC	AGGACCTGAA	CGCGCCTTCT	GATTGGGACA	720
GGCGTGGGAA	GGACAGTTAT	GAAACGAGTC	AGCTGGATGA	CCAGAGTGCT	GAAACCCACA	780
GCCACAAGCA	GTACCTCGAG					800

(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

CAATTGCCAA	GGAAACAGGC	CTTGGCCTGA	AGGTACTAGG	AGGAATTAAC	CGGAATGAAG	60
GGCCATTGGT	ATATATTTCAG	GAAATTATTC	CTGGAGGAGA	CTGTTATAAG	GATGGTCGTT	120
TGAAGCCAGG	AGATCAACTT	GTCTCAGTCA	ACAAGGAATC	TATGATTGGT	GTATCATTTG	180
AAGAAGCAAA	AAGCATAATT	ACCGGAGCCA	AGTTGAGTAC	TAGGTTAGAA	TCTGCTTGGG	240
AGATAGCATT	CATAAGACAA	AAATCCGACA	ACATTCAGCC	AGAAAATCTG	TCATGTACAT	300
CAC TTATAGA	AGCTTCAGGA	GAATATGGAC	CTCAAGCCTC	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```

GAATTCGGCC TTCATGGCCT ACAGCCCTCT TACTAGGCCA GCACGCTTTC GCTTTTGCAT      60
TTACAATCAC ATACCCCATC CCCTCCACTT GAAAAAGAAAT TTGTTTITG TCGTTATCCA      120
AAAAATCTCAT CTTAAATCAA CCGTCTCGTC TCCCTGTAGC TTCATTACCA TCTCAGAAGC      180
AGCAAAGGAG CCAGCAAAAG CTAAGGTACA GAAAGTCGCT TTGGAGGATG ATGGTGAGTG      240
GTTATACTTA ATAGAAGCTA TCATTTATTA AGCACCTAAT GTGTGTCTGG AGGGGCTCGA      300
G                                                                                   301

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(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC TTCATGGCCT TGCATGCCCA CAGTGAGCTG AGATCGCAGC ACTGTACTCC      60
ATCCTGGGGG ACAGAGCTAG ACTCCATCTC AAAAAACGAAA GTGCCTGGTC GTCTTTCCAC      120
ACGACTCCGT TTCCACTCCC ATAAAATGCT ACGTTAGCTG TTTTGAGGGT AGATGCCCTT      180
AGACTGCCAA CTCACAAAGT TTTATTGGGC ACCTGTTACC TGTTACGACG AGATTGTGTA      240
AAAAAGACAC ATCAGGTGGC CTTTGCTTGC AAGAAATCAG CCTTTGGAAC CTGTGGAGAA      300
AAGTTAAATA CTGCGTACTG TGCAAATGAA GGGTGGGAGC TATTGAAGGG AAGAGATTCA      360
CCCTGAAAAC CCAAGAATGG CCAAATCTCG AG                                                                                   392

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(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GATTCGGCCT TCATGGCCTA GCTGGTCTCT GATTGCAGGA TCGAATCGCC CCCAGCAGTA      60
TGTGTATATG CATCAGATAA GGTGAGGGAC AACCTTCCTC ACCCCCATAC CTGGCCAGCC      120
TGTAATGGGG AGGAGGCCCTT TCTGTGGTGT GGTGGGGCTG GAGATTGGGC AGGGACAGAG      180
ACATACCTTC TCTGGGAATC TGAGAGAGAT ACCTTGAATC TAGGGGAAAG GGATTAGGTT      240
TTGAAAATGT TAGCCATTTT GTAAAGAGAA GTCCCTCACC ATTTCCCTTC CCATTAGTCC      300
TGGGAAATAG ATTGGGTAGA GGCTCAGAGC CTGGCCCTG CTGCACTCCC AGCTTGGAGC      360
TACTGGGTTG TTGACAAATG TTTGGGGTTT CCAGGCCTTA GCAAGAGAAA GCCTCCCCAG      420
ATACCACTCT AGGGGTAGAT GAAGGGGGCA GGAGCCCTGA AGGAAGGATT TGGGGCCGGC      480
CATTCAATCA TTCAGAAACA CTTATCATCC CTTATCAGAA GCCCTGACCT ATTGAGAGTC      540
AGGCACGTGC TATTGAGAGT CAGGCACGTG CTCATATAAA GATGAGTTTA ACATGGATCT      600
CCCTCTCGAG                                                                                   610

```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC TTCATGGCCT AGAGGATTTA CACATGGCAT TCAGTGTCTCT GTATAGATCT	60
GCCTACCTTT GTGAATTCAT CTGTAAACCC CTCTTCCTTT GAGAGAGCAC CGGCGATGGT	120
GGTTAACTCC TGTGTTTTCT CTCTCTCCTA CTGGTTATTC TTGAATTAAG CACAGACTCG	180
TCAGCTCGGT TGCTTTATCA TGAATAATGT GTGTGACCTT GCAGTTCTTC CACAGTTCAG	240
CAACAAGTG CTAGCTTCAC TGACCAAAAA TTAAGGAAGG AAAACACAGT TTTTAAAAACG	300
ATCCATCTTT TAACAGCCGA AACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC TTCATGGCCT ACTAAGAGAA CAATTAGAAT ATTGGAAGAT AAAGGGACAA	60
GTACTGAATT AGTTAAAGAA AATCAGAAAC TTAAGCAGCA TTTGGAAGAG GAAAAGCAGA	120
AAAAACACAG CTGTCTTAGT CAAAGGGAGA CTCTGTTGAC AGAAGCAAAG ATGCTAAAGA	180
GAGAACTGGA GAGAGAACGA CTAGTAACTA CGGCTTTAAG GGGGGAATC CAGCAGTTAA	240
GTGGTAGTCA GTTACATGGC AAGTCAGATT CTCCTAATGT ATATACTGAA AAAAAGGAAA	300
TAGCAATCTT ACGGGAAAGA CTCCTGAGC TGGAACGGAA GCTAACCTTC GAACAGCAGC	360
GTTCTGATTT GTGGGAAAGA TTGTATGTTG AGGCCAAAAGA TCAAAATGGA AAACAAGGAA	420
CAGATGGAAA AAAGAAAGGG GGCAGAGGAA GCCACAGGGC TAAAAATAAG TCAAAGGAAA	480
CACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC TTCATGGCCT AGATCCAGAC ACGGCACTGC AGCTTTCAGC TGACTAGCTG	60
TGTGACTTGG GCAAGCCCCT TAATCTCTCT GATCTCGGGC TCCCTCCTCT GTAAATGGA	120
ATTAAGAATA ACCTCATGA GGAGCTTCCT GAGGAGGTAA GGAAAGTGCC TGGCAGAGTG	180
CCAGGCTGCT AAGAGATCAA TAAATGTCCC ATCCCCCAGC CCCACCCAG TTTCTTCCAG	240
GAATTTGAGA GACTCCTCCC CCTGTGTTTG AAAGTGGCAA AGTCTGGCAC ACTTGCCCTCA	300
TAACACATAA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```
GAATTCGGCC TTCATGCCTA AGCTTCCTTC AGCAGCGCAG GCGGTGGTCC CTGAGGCCCC 60
TGAAGAGAGT CAAACTTGCG GGAATTTTGC AGTTTATCTG CAGGGCTGTT GTTTCAGCA 120
AGACCCAAAG CTAGAAAAGG AGGAGGAAGA AACTGACCCG ATCAGTGCCA GAAGTCATTG 180
TATTCAAAGA AGAATAAGCA AGAAAGAAAA GAAGGAAGGA AGAGAGGTAG ACAGATACAA 240
GATGAAATCC TGTCAAAAAA TGAAGGAAA ACCAGAAAAT GAGAGTGAAC CAAAGCATGA 300
GGAAGAGCCA AAGCCTGAGG AAAAGCCAGA AGAGGAGGAG CTCGAG 346
```

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

```
GAATTCGGCC TTCATGGCCT ACGGCACTTC AAAAATATAA ATCAAAGTCC ATGACTCTAA 60
AAATAACATA TGCATTGATA TGCTCGCCCC TTTGACCCTT CTCTCAAGAG AAATTCCTG 120
CCAAGTAATC CACATACATA AGAAGTGTA AAGTCCCTA GATTAAAAGA GCATAAAACT 180
TCATTATGGA AACACAGTAG TCCCGGTAT TTGGGAGGCT GAGACAGGAG GATCAGGAGT 240
CCAGGAGTTT GAGGCTACAG TGAGCTATGA TCGCGCCATT GCACTCCAGC CTGGATGACA 300
GAGGAAATAT TAATTTTGA GTAATCAGAG AAAGCCAGGT CTCGAG 346
```

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

```
GAATTCGGCC TTCATGGCCT ACCCCATTCA TGCAGGAATA AATCAAGTGA GCAGTTCCAG 60
ACTTTTGCAT AATATTTTTA CTATGATGCT GTTTTATTA TATTTTCTAA ATTTCAAAC 120
AAAAAGTGAA TGTTTGAAAT TGCTGGGTCC CGATGTTGGT GGCTGTTGGA GTTTTGACC 180
ACTCGTAGC AGTGATTGA AGATTATAAT TAGCTAAAT CCAAACAAA AAACCAACAA 240
CAAAAATTGT ATGGTGCAG ACATGCACCT TGACAATGGT ACTAATTGT TATTCTATAG 300
AACACGTTAG AATAGATCTA TTTTGCCAG AGCTTCTCGA G 341
```

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GAATTCGGCC	TTCATGGCCT	AAAGATAAGG	TGGCTGTAAA	TGCGTGGATT	TATACCTGAG	60
TTCTCTCATC	TGTTTCACTG	ATCCATGTGT	CTGTTTTTAT	GCCAGTACCA	TGCTGTTTTG	120
ATNACTATAG	CTTTGTAATA	AATTTTGAAG	TCAGGTAGTG	TGATNCCTCC	AGCTTCATTC	180
TTTTTGCTCA	GGATNGCTTT	GGNTATTCAT	AGTCTTGTTG	TTCCATGTAA	ATTTTAGGTT	240
TTTTTTTTTT	TTTTTTTTTT	TTTTTACTAT	TTCTGTGAAG	AATGTTATTG	GTATTTTGAT	300
AAGGATGTGA	TTGAATCTGT	AAATTGCTTT	GGGTAGTCTT	GTCATTTAAA	AATATTGTTA	360
TAGTTCTTCT	AATCCATGAA	CATAGAATAC	CTTCCATT	TTTTGGTGTG	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC	AAAGAGGCCT	AGGCAGACAT	CCATAAACAT	TTTCAAATG	CAGGGTATGT	60
TTTTCAGTGT	TAAGGCAACT	GTTCTG				86

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGTA	ATAACATTTT	AAAGCAGGAA	GATCTACGG	60
TGTGATCGTG	GTACAGCTCT	TAGTTCAAGT	GTGAAGACAT	TTGGTTGTCT	TGTATATGAC	120
CTAGAAGAAG	GGGCGTCTGC	TGGAAAACAA	TGCTGTTCTT	TTTCTCTTTG	TTTTTTGGGA	180
CGGGGTCTTA	CTCTGTTGCC	CAGGCTGCAG	TGCAGTGCCT	CAATTTTTC	GTTTCAGTGCA	240
GCCTCGACCT	CTGGGGCTTA	AGCGATCCTC	CTGCCTCGGC	CTCCCCAGTG	ACTGAGACCG	300
CAGGCACACA	CCACCACACC	CGGCACCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	AAAGAGGCCT	AAGCCAGGGT	AGGGACAGCA	GACTGGCAGG	AATGAGTGAC	60
AGTTCTATGC	AAATGGAGTT	ATTATTATTA	TGTTATTAT	TAATAAGGGC	AGGTTTGATC	120
CAGAACTGCC	CAGTATGGCC	TGTGACTTCT	GCGCAGCAAT	TATTTCTCCA	GGGACAGGGC	180
CTGAAGCTAC	CTCACAGTGA	TGCAAAAAAA	TGGGATTCCC	CACTAACCCC	CACACACACC	240
CCCTTCCTAC	CAAACCACAC	ATCTCTCAGT	CCTCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC	AAAGAGGCCT	AGGATCACGG	AGGTGGTGCC	TGTGTGTCCC	ACAGGAAGCA	60
AAAGCTGATG	CCCAGTTCCC	AGCATACCTA	AGTAACTTC	AGGTCCACTC	CCAGCACGTT	120
TTCGTGATA	GTAAACTAT	GAAGGAACTC	AGTGTAAG	GAGCTTCTAC	AAAATAGGCA	180
GAGACAGTA	GCCAGATGGG	CCAAGGGCCC	CAGCCACCCA	CGCCCCTCCC	TCTCCTTGAA	240
GACCTTCGGT	TCCAACCCCA	CCATCAGCAG	GGCTCTGCTC	AGTTCCCTCCT	TATGTGTATC	300
ACCACAGGGC	TGCTGGCTCG	TGTCACGTTT	ACCACCAGAC	CCCACATCAG	GAGTCCCCGC	360
AGGGGTGTGG	GGAGGCAGCG	CTGCCTGGTT	GGCCGTGGAG	CGTATGGAA	CATGGTGCCT	420
CACAGGCAGT	CTGCTTGGCG	TCCTGGATCC	TGGCTGTATC	CCGCTGGAAG	GGATGTGTGT	480
GGTCTAAGA	TATGTATATA	ATAGAAACAT	TTATTCAGAA	GCTTTAGTCA	AGACTTCATT	540
TTTAAGTTCA	GAGTAATAAA	CTCATAGTCT	AAATTCCTA	ATTTTCTGT	TTAATTACA	600
TAAATAAAAT	GAAATGCAAT	TTCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC	AAAGAGGCCT	AGAGGTGCCC	ATTTCAATAA	ATTTTAGCAC	ACTGGATGAT	60
AAAGGAGAAA	TGCTTTGGTT	TAAGAGAGGG	AAATCTTTGT	TACCAATACT	ATCGGTGAGT	120
TCACCTAATA	CTTCCTCGTC	ATCAAGTTCA	TTGGAGTACG	CATCTTCTTC	ATCCTCATCT	180
CCCGGTTTCA	TGGGTTCACT	TTTGACAGGG	CACTCCCCGT	TTGGGTGTAA	AACGTTGCTT	240
TCTTTTGGCC	TTTACAGTT	GTCTCTTGG	TCTTTGCTCT	CTGACATCTT	GCTAGACTCA	300
GACGATGAGT	GGCTGAGGGA	GACAGAGGTA	ATTGGGGTGT	TCACTACTAA	ACTAGACAGC	360
CCCCCAGAT	TCACTTCAGC	CTTTGGCATT	TGGGTAATCC	CCAGCGGCTG	CTCTGCTGAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

GAATTCGGCC	AAAGAGGCCT	ACCGCCCATC	GCGCCGGCGC	GACCCGCAGG	AGCGTAGAGA	60
GCGCGGGACT	AGAGTGCAGA	GCTCCGGGAC	GTGGATCGGA	GCCGGCGCGA	TGGGCGGAGA	120
GCAGGAGGAG	GAGCGGTTCG	ACGGCATGTT	GCTGGCCATG	GCTCAGCAGC	ACGAGGGCGG	180
CGTGCAGGAG	CTTGTGAACA	CCTTCTTCAG	CTTCCTTCGA	CGCAAAACAG	ACTTTTTCAT	240
TGGAGGAGAA	GAAGGGATGG	CAGAGAAGCT	TATCACACAG	ACTTTCAGCC	ACCACAATCA	300
GCTGGCACAG	AAGACCCGGC	GGGAGAAGAG	AGCCCGGCAG	GAGGCCGAGC	GGCGGAGAG	360
GGCGGAGCGG	GCGGCCAGAC	TGGCCAAGGA	AGCCAAGTCA	GAGACCTCAG	GGCCCCAGAT	420
CAAGGAGCTA	ACTGATGGAG	AAGACTCGAG				450

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC	AAAGAGGCCT	AGCTACTAAG	GCAGGTGCAG	CATCAATGAT	TCACTACATG	60
GTTCTGATAT	CAGCTCGCTT	GGTACTACTC	ACTTTGTGTG	GATGGGTACT	TTGTTGGACC	120
CTCGTCAATC	TCTTTCGAAG	CCATTCAGTC	CTCAATCTCC	TTTTCTTGG	CTACCCGTTT	180
GGTGTATTATG	TTCTCTTTG	CTGTTTTCAT	CAAGATAGTA	GAGCACATCT	TCTTCTCACA	240
GACTACAACT	ATGTGGTTCA	GCACGAGGCA	GTAGAGGAAA	GTGCCTCGAC	TGTGGGAGGC	300
TTGGCCAAAT	CCAAAGACTT	TCTCTCCTTG	TTGCTGGAGT	CGCTAAAAGA	ACAGTTTAAT	360
AATGCCACAC	CCATCCCCAC	CCACAGTTGT	CCCCTATCTC	CAGACCTCAT	TCGCAATGAA	420
GTAGAATGTC	TGAAAGCAGA	TTTCAACCAC	CAACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC	AAAGAGGCCT	AGAGTTTTC	TAAGCCCGGC	TGGTGTTTAA	AACGTSTTTT	60
GGCTTTGTTC	ATTTTATGGT	GTTGGTGTG	GTATTGGTGG	TCATGTACTG	GCATGTAAGA	120
TTTCTTTTCT	CTTTCCTCT	TCTCTCTGCT	TCTACATTCT	GTTTATTGAG	GCTTCCAAC	180
GAATATGAGA	GGAACGGGAG	ATATGAGGGC	TCAAGTCGCA	ATGTATCTGC	TGAGCAAAAA	240
GATGAAAACA	AAGAAGCAAA	GCCTCGATCC	CTACGCTTCA	CCTGGAGCAT	GAAAACCACT	300
AGTTCAATGG	ATCCCGGGGA	CATGATGCGG	GAAATCCGCA	AAGTGTGGA	CGCCAATAAC	360
TGCGACTATG	AGCAGAGGGA	GCGCTTCTTG	CTCTTCTGCG	TCCACGGAGA	TGGGCACGCT	420
GGTAACCTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

```

GAATTCGGCC AAAGAGGCCT ACCCTGAACT ACTCCAGTGT GCACCTGCAC AACCTCCATG      60
GTGCCTCTGG AATTGGGTAG CATGGTGGCC CTGCTGATGA GCACCCCAAG GGGCCATTGG      120
GGGACCTCTG AGAATCTCTG CCAGAGCAGT TTGGGTGGGA GTCGATTAAG GAAAGAAGCA      180
GCAAGATCCA GGACTTTTAA TCTTAAAAGA GAGAGAAATG CTGGCAGATG AACATTCTGA      240
GGATAAGGAG CCTGAGTAAT TGAGCGATTA GGGATGGAGA CATACGATTG AATTCTAGAC      300
GTGCCTCGAG TAGCCAATCA AGCTGTGTCT GGCTGTGCAC TATCCAGGCC TCCACATTCT      360
GTGACAAACT AACAGGGCCG GCTCCTGTCA CTCCTGTTCT CGCCAGCGGG TTTACCCTG      420
AAGGTGACTC AGGCCTTCTC TTTGCCCTAG ATCGTGGGGA TCATCACACG GCACAACCTC      480
ACCTATGAAT TTCTGCAGGC GTAGCTCGAG                                         510

```

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```

GAATTCGGCC AAAGAGGCCT ACGCATCCC C TGAGCTCTT GCGCCAGAC GTTGGTACC      60
AACTCGAAAC TGCGCTTGCA CCGGTTAAGG GTACATGACA AAACACCTAC CCACTTCTGT      120
CCACTTTGTG ACTATAGTGG CTACCTTCGC CATGACATCA CTCGTCATGT CAACAGCTGC      180
CACCAAGGCA CCCCAGCCTT TGCCTGCTCC CAGTGTGAAG CCCAGTTCAG CTCAGAGACA      240
GCACTTAAGC AGCATGCTCT GCGCCGACAC CCGAGCCTG CACAGCCTGC CCCTGGCTCT      300
CCTGCAGAGA CCACTGAGGG CCCCTGCAC TGTCCCGCT GTGGGTTGCT GTGCCCCAGC      360
CCTGCCAGCT TACGAGGACG GCCTCGAG                                         388

```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```

GAATTCGGCC AAAGAGGCCT ACAGAACTGT GCCATATTCT TAAACATCAT ACAATATTGC      60
CTTTCAGGCA TGAAAAGCAA AGGGAATTAT TTGTTCAATT GATAGCGCTT TAGTAATGTA      120
AGTGGATACA CTTAGGGCTA GCCCTCTGGC TTGTTACCAT GGTAAGCTAG GGGAAATAG      180
TTGAGGGGTC TGCAGCAGAG CTTGGAGAGG ATCTGGGATG TTAAATTCTC AAGTACTTGA      240
ACTTAGCAAC AGGACTTGGT CCCATCCACA CCCTGCTCTC CACCCAGCT GGAATAATT      300
AGTGTGACT ATGGAGGCAA AGAGAAACAT ACTTGTAAGC TTTTGTGTTT GGATTTCTT      360
TGGGGTTTCC TTTTGTCTT TTCTGAACTG GAGGGTGAAG TCTCGAG                                         407

```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```

GAATTCGGCC AAAGAGGCCT ACATAATCA AAAATTTCTG TGAAGATGGG AAATAAGGCC      60
AAGATTGCAA AATGTCCTTT AAGAACAAAA ACTGGGCACA TTCTAAAATC AACACAAGAT      120
ACTTGATTG  GGAGTGAAAA ACTTTTGCAA AAGAAGCCAG TTGGTTCAGA AACATCACAG      180
GCAAAAGGTG AAAAAAATGG AATGACTTTT TCATCCACTA AGGATTTATG TAAACAATGT      240
ATAGATAAAG ACTGTCTTCA TATCCAGAAA GAGATTTTCA CTGCAACCCC TAATATGCAG      300
AAGACTAGAA ACACCCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GAATTCGGCC AAAGAGGCCT ACGAGAACTT CTTTTCATC TGAATCTTCG TCAAACCTCTC      60
TCTCAGAGCC TTCCTCATCT AACACTTTTT CAGAGCCGTC ATCTTCAAAT TCGGAGTTTT      120
CAGAGTCATT TTCTTCTAAC TCTTTGTCAA GAACATTTTC ATGAAGCTCC TTTTCAGAAC      180
CTTCCTCGTC CAAATCTTTC TCGAG                                     205

```

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC AAAGAGGCCT ACTCAATACT GAGGCTGATT GGTCGTTTAG GCCAATTGGG      60
TTTGAAAGAA GGATTTCAT CTGCTGTGAA AAATATTAGT TCGGTTATTG GTATGTTTAT      120
ACAGCATGCT CACGATGAAG ATATACCATG GGGTATACAG TTAGCAGCCG TGTATGCTCT      180
TTGTGACTTG AGTCCCAGCA ATCCAGCAGA AATTTCCAAG ATCCTGGAAG CTTGGCGGAG      240
AGAGGCCTCC AAAAGCGTTC CGTCTGCGAT TGTCAGCTGC CTAGAGGAAG TCAGTGCCCT      300
GAGCACAGAG GAGCTTGGCT GACCTGGGAT GCCACTGAGG CTTGAGAAGT GCCTTGACAC      360
ATTTTGAACA CAAATAGTTT GATCAGCTTT CAGAATACAA AGGGAGGTTT CAAAACAAAA      420
AGACATAAAA TAGATAAAAG CAGACTCGAG                                     450

```

(2) INFORMATION FOR SEQ ID NO:1275:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 255 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC AAAGAGGCCT AAAGCAACAG GAAAGGATAA ATTCACAGAG GGAAGAGATA	60
GAAAGACAAC GGAAATGTT AGCAAAGCGG AAACCTCCTG CCATGGGTCA GGCCCTCCT	120
GCAACCAATG AGCAGAAACA GCGGAAAAGC AAGACCAATG GAGCTGAAAA TGAAACGTTA	180
ACGTTAGCAG AATACCATGA ACAAGAAGAA ATCTTCAAAC TCAGATTAGG TCATCTTAAA	240
AAGGAGGCTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:1276:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC AAAGAGGCCT AACAGATTG ACCGTGAATG GTTCACTGTT GAAACTCTGT	60
GATGGGTACT TGAGAATTTA TTATATTAT ATGCCTATAT TGCAGATATT TGAAGTTTCC	120
CAATAAAATG TTTAAATAG TGGCAGGGGG CAAGAAGAAA AGGACCACTC AATTTAAGA	180
AAAAATAATT TTAAGACACA CAGAGAATAG GAAGAGGGAA AAATTGGTGA GGCAAGAGAA	240
AGGCAGCAGG TGGGGCCATA TCAAGAGTGA TTCTTCAGCA GGTGAGGCGT GATACCACCG	300
CAAAAGTAGA GGGTTGGCTG TAAGATAGGG GGCACAGATG GCTATAATGC AAGGGAAGGC	360
GCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1277:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 624 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC AAAGAGGCCT ACTCAGAAAC AAAGCCAAA TTAAGTTCAT CATTAAAAAG	60
CCCGAAATGT TTGAGACGGC GATTAAGGAG AGCACCTCCT CTAAGAGCCC TCCCAGAAAA	120
ATAAATTCAT CACCCAATGT TAATACTACT GCATCAGGTG TTGAAGACCT TAACATCATT	180
CAGGTGACAA TTCCAGATGA TGATAATGAA AGACTCTCGA AAGTTGAAAA AGCTAGACAG	240
CTAAGAGAAC AAGTGAATGA CCTCTTTAGT CGGAAATTTG GTGAAGCTAT TGGTATGGGT	300
TTTCCTGTGA AAGTTCCCTA CAGGAAAATC ACAATTAACC CTGGCTGTGT GGTAGTTGAT	360
GGCATGCCCC CGGGGTGTC CTTCAAAGCC CCCAGCTACC TGGAATCAG CTCATGAGA	420
AGGATCTTAG ACTCTGCCGA GTTTATCAAA TTCACGGTCA TTAGACCATT TCCAGGACTT	480
GTGATTAATA ACCAGCTGGT TGATCAGAGT GAGTCAGAAG GCCCGTGAT ACAAGAATCA	540
GCTGAACCAA GCCAGTTGGA AGTTCAGCC ACAGAAGAAA TAAAGAGAC TGATGGAAGC	600
TCTCAGATCA AGCAGAACCT CGAG	624

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```

GAATTCGGCC AAAGAGGCCT ACCCAAATCC CATTTAGATA AATTGAGGTT CATTTTTCAC      60
ATAGACTTGC AATTTTLAGA CACCACATT TTTTATAGT AACAGCCTCA TTGCCTGTA      120
CAATAACTAA TAATACAGTA TTTCATAGGT ACATTGTATG TGCACAGGAA ATTTTCTTT      180
AAATCTTAAA AGCCTTTAAT AAACGGGATA TTTAATATT TTAATGTTAC TACATTTAAA      240
AAATAGTGTT TTCCTACAAA ATTTTCTGTA TTCAGTAATA CTCGAG      286

```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```

GAATTCGGCC AAAGAGGCCT ACTCATCATT AGCTGAAAGT TTGAGAGCTG CAGCAGAAGC      60
GGCTGTATCA CAGACTGGAT TTAGTTATGA TGAAAATACT GGACTGTATT TTGACCACAG      120
CACTGGTTTC TATTATGATT CTGAAAATCA ACTCTATTAT GATCCTTCCA CTGGAATTTA      180
TTACTATTGT GATGTGGAAA GTGGTCGTTA TCAGTTTCAT TCTCGAG      227

```

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```

GAATTCGGCC AAAGAGGCCT ACCCGTGC GC TCTACAAATA GTCCGTGAG AAAGATGGCC      60
GGGAACFCGA TCCTGCTGGC TGCTGTCTCT ATTCTCTCGG CCTGTCAGCA AAGTTATTT1    120
GCTTTGCAAG TTGGAAAGGC AAGATTAAAA TACAAAGTTA CGCCCCAGC AGTCACTGGG      180
TCACCAGAGT TTGAGAGAGT ATTTGCGGCA CAACAAAAC TGTGGAGTT TTATCCTATA      240
TTCATAATTA CATTGTGGAT GGCTGGGTGG TATTCAACC AAGTTTTTGC TACTGTCTG      300
GGTCTGGTGT ACATATATGG CCGTCACCTA TACTTCTGGG GATATTCAGA AGCTGCTAAA      360
AAACGGATCA CCGGTTCCG ACTGAGTCTG GGGATTTTGG CCTTGTGAC CCTCCTAGGT      420
GCCCTGGGAA TTGCAACAG CTTTCTGGAT GAATATCTGG ACCTCAATAT TGCCAAGAAA      480
CTCGAG      486

```

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

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GAATTCGGCC AAAGAGGCCT AGACAAATT CCTTCATG CTCCAGCCG TGTTATTAA      60
AGTAATTAAC CTTAATTTAT AAATTTTAT ATCAAACGCT CTTTAACTT TAGAACTGG      120
CAGGAACAGC CTTATCCCTG GGCTCCTAAT AGTCTCCAT TTAATCAAAA TTCATCCATC      180
AGGTTCCAGT GTTAAATCAT CTTTAAATG GGAGTTACAT TCTGGTTAAT AGTTTATAA      240
TTCGCCTCCT CTAATAGTTT TTACCACAGG GATCTCGACT CCATTTTTC TGACTCTATT      300
ATTGCTGGCA TCGGATTTCT GCGGGGATGG CTTAACGCGG CCCTGCCTCT CTGGCCTCTG      360
CTGGTCGCCT CTTTGTCTCT TGGTGGTCTC ATTAATTCCT GAGAAGAGTT ATCCTCCTC      420
CTCACTCGAG                                     430

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(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC AAAGAGGCCT AATCCCTTC TGCATGTTCC CTCCTGCAG GTCTGATGG      60
GCCATCCAC CTTGCTGGGG AGCACAGCTT GCCCTCCCTC CCTCCTTCT CTTCTGGCGT      120
TGCCTGCTGG GTGCCATCGG AGCAGTCCTC ATTACTTCCC ACTTTTGGCC AACTTCTGCT      180
GCTGTGACCA GTCGCATACA CGTGGACACC GTGGGGACTG CCCCTCCATA CAGCTCCTCT      240
GTAAGCTTAG GACCAAGGCT GCCTCTCCAG TCTCCCTGGC CCATGCCTGC CCCGGCATCC      300
TCCGCCCCAG CTACACTGGC CCCCAGTCTC GAG                                     333

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(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC AAAGAGGCCT AGGACGTTGG TGTGAGGTT AGCATACGTA TCAAGGACAG      60
TAACTACCAT GGCTCCGAA GTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC      120
GTCTGCGAAA TCATATGGCT GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA      180
AGTTTCGTGT GGCTGATCAA AGAAGAAGG CATACGCAGA TTTCTACAGA AACTACGATG      240
TCATGAAAGA TTTGAGGAT GAGCTCGAG                                     269

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(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

GAATTCGGCC	AAAGAGGCCT	AGAGCGTCAA	TTATATCAAT	TTGTCCAGA	TTTGATGAG	60
CTGTGAGGAT	GTAACACAAG	GCTGGAGGAG	GCAGATGAGT	TTTTATCTCT	TCACAGGGCT	120
GGTCGCGGCC	AGGTGTTTTC	AGAGGTATCG	CTGGGGGCCA	CAGGGTGTC	ATCAAACTGA	180
AAATCCCCGC	TGTCCTTCCT	CTGGTGAATT	TCTGTAGAAC	CTTCATTCCC	ACCAGGCTGC	240
AAGACTTCCC	TTCCAAGTGT	CTTGCTTCG	ACATGGTGAA	CTCCAAGTGC	ACTTCACCGA	300
ACATTCCACA	GGCATCTTGT	ACCAGAAGGC	AGGCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 496 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

GAATTCGNN	AAAGAGGNC	AGAAATCANA	AAGCATGCCT	GTGCAATTGA	ACAAAGGGCT	60
AAGTTCTAAA	AACATCAGTT	CATCTCCAAG	CGTTGAGAGT	TTGCCTGGAG	GAAGAGAATT	120
CACTGGCTCT	CCACCTTCAT	CTGCTACTAA	AAAAGATTCC	TTTTTTAGCA	ACATCTCAGC	180
TTCTCGCTCA	CACAGCAAAA	CTATGGGCAG	AAAAGAATCT	GAAGAAGAAT	TAGAAGCCCA	240
AAATTCCTTC	CTTCAAGGGC	AGTTGAATGA	CCTGGATGCC	ATGTGCAAA	ACTGTGCAAA	300
GGTGATGGAC	ACTCATCTTG	TAAATATTCA	AGATGTGATA	TTACAAGAAA	ATTGGAAAA	360
AGAAGATCAA	ATTCTGGTTT	CCCTGGCAGG	ATTAAACAG	ATCAAAGACA	TTCTAAAAGG	420
TTCCCTGCGT	TTTAACCAGA	GCCAGCTAGA	GGCCGAAGAG	AACGAACAGA	TCACCATTGC	480
GGACAACTCA	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

GAATTCGGCC	TTCAATGGCCT	AGCAGAAGCT	AAGAACTGTC	TTAAAATAAA	TTTTAAAAGT	60
AAATAAGTTA	TAATGCATAG	GTTAGCCCAT	TCATTAATGA	TTTTCAGTTT	CAAGTGATAA	120
TATTTCTTAA	TGATTACTAG	TTGATCAGTG	TAATGAAAAC	ATTGAGTAGA	CAAACTAAAT	180
GCACAGTATA	AATGTGACAT	AAACACTGGT	TTCAATTTGT	CTCAAGAAAA	AAGAAAAAAA	240
AAAGGCCCT	GCAATGGCAA	AGAGTGGCCA	CTATTGGGGT	AATTCAAACA	ACCCACTGTA	300
ATACAGGAAA	GCACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

AAAATGGAGA AGTTACTGGC TGGAGAAGAT GGGACAAGTG AACGAAGGAA AAGCATCAAA	60
ACCTACAGAG AAATTGTTCA AGAAAAAGAG CCGAGAGAGA GAGAGCTGCA TGAAGCATAT	120
AAGAACGCTC GGTCCCAGGA GGAGGCAGAG GGGATCCTTC AACAGTACAT TGAGAGGTTT	180
ACCATCAGTG AGGCTGTTCT CGAACGCTTG GAGATGCCAA AAATTCTGGA AAGAAGCCAT	240
TCAACAGAGC CAAAACGCGA G	261

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC TTCATGGCCT ACTCTGAAGA TATTATAGC TCTCTTAGAG GTGTCACTGA	60
AGCAATCCAG AATTTAGCT TCCGTAGCCA AGAAGATATG AATGAGCCAT TGAAAAGGGA	120
TTCTAAAAAA GATGATGGCG ATTCAATGTG TGGTGGTCTT GGGATGCTCTG ACCCAAGAGC	180
AGGAGGTGAT GCTACTGACT CAAGTCAAAC AGCTCTTGAT AATAAAGCTT CATTGCTCCA	240
TTCAATGCCT ACTCACTCCT CTCCACGCTC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GCGATTGAAT TCTAGACCTG CCTCGAGAAC GCCGGGGTCC ATCATTAGCA GTCCTCACAT	60
GCGCCGGAGA GCTACATCAA CACGAGAGTG TCCATCTCGC CCACACCAGA CTATGCCCAA	120
CTCATCTTCC CCCCTCGAG	139

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

GAATTCGGCC AAAGAGGCCT AATAAGTTTG ATTAAGCTTG CAGACATTAA GCTTTTCTAG	60
CAGCTGGTGT GTGCAGAGGC AGATGGCTCT CTGGTTCCAG GACTACCTAC AATATAGAGA	120
AATTTTCTCT ATTCCAGTCA ATTCATCATG GGTAAGAATA GTCCATTTTG GTAGTGTTAT	180
TTCATCGTTT ACAATCTACC TATGGGTAGT GGCTGGTAAC TGCCTGGATG TTGACATTTT	240
ACAAAGGCCA TACTTAACCA CACTTTTATT TCTATTTGTG CGATGCCTTG GAGTAGTTTC	300
CCAAAGTGAT TTTGAGTGTG GAAGAAATGG TATTGTCCCC GAACAGCTGG TGGTCGAG	358

(2) INFORMATION FOR SEQ ID NO:1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

GAATTCGGCC TTCATGGCCT AGAGGATCCT AATGAAATAC CTGAAACATA TATTGGCATT	60
TATCAATGGC TCAAATCTTC ATTTATCTCT GGCCTTAACC CTGGCTCCTG AGGCTGCGGC	120
CAGCAGAGCC CAGGTCGAG	139

(2) INFORMATION FOR SEQ ID NO:1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GAATTCGGCC TTCATGGCCT ACTATCAGGA AGTGATTCTG GGAGAGGGGA TTTTACCTGA	60
TGGTGGAGAA TACAAACCCC CTTCTGATTC TTGAAAAGC AGAGACTATT ACACGGATTT	120
CCTAATTACA CTGGCTGTGC CCTCGGCAGT GGCACCTGGTC CTTTTTCTAA TACTTGCTTA	180
TATCATGTGC TGCCGACGGG AAGGCGTCAT CCAACTGGTC CATCACAGTG CTATTTCAGAA	240
ATCTACCAAG GAGCTTCGAG ACATGTCCAA GAATAGAGAG ATAGCATGGC CCCTGTCAAC	300
GCTTCCTGTG TTCCACCCTG TGA CTGGGGA AATCATACCT CCTTTACACA CAGACAATA	360
TGATAGCACA AACATGCCAT TGATGCAAAC GCAGCAGAAC TTGCCACATC AGACTCAGAT	420
TCCCCAACAG CAGACTCTCG AG	442

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC TTCATGGCCT ACATGAATTA TCTGTGAGTT GGTAAAGGT AATATTGGTT	60
AGCATCAAGA ATAGGAAGCT ATTAGTTTTC AATCAAGAAT AAGCTCAAAT TTGGTCTAAA	120
TCTTAATTTT AAGCTGGGTA ATCATTGATT TACAATTTT TTCTTGGTGT CACATTTCTT	180
CCTAAACAAT AATCAATGAA GCCTTTCCCA CCCTGTGCCT TTGCTCTCGA G	231

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC TTCATGGCCT ACTCTGCTAA CTCCTGCCT CTATGTCTTT CCCACCTAC	60
CTCCTCTCCC CATTCACT CCGCGTGAC CTCATCCATT TACCTGCCTT CAATTAGCAT	120
CCATACGTTC CTCCTTTCTC AATATAAGTC CCCAGCTGAG ACTCTGTTTC TGAATCCAG	180
ATTTTATTT CCAATTCTAC TGAACAACT CAGTCTAAAG CCAAGCCCAT TATCTTCTCC	240
TATAAGCCTG CATCTTTCT TTTCTTCTT TCTTTTTTT TTTTAAACAG AGGTTAATGG	300
CATTCAACAT CTACCCAAGC ACCAGGAGT TAGATTGAGA ACGGATGGAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

GAATTCGGCC TTCATGGCCT AGGCTAACTG TTATTTGCAT CTTACAGCTC AGAAAACAAG	60
CATGGTGAGA TAAGGAACT TACTAAGGT CACATAACTA GTAAGTGGTG GAGCCAGCGT	120
TGAAACTCAG GAAGTCTGTA CACAAGTGGG AGGGAAGGCT AATATTGAA ATGATAGACT	180
CAACATTCAA TATTTAGTA TCGATGAGCT CTAAGTTGAT AGAGCTATGT GTAAAAACCC	240
TGCATTTAAT ATTAAGAAAT CATTGGCAGA AGAGTAAGAG AGGGCTTTGG TCAAGTAAGC	300
TGAGTGCATA AGAAACTCT GGCATTGAG GTGTCCTTAG CTCCAGATGC TTTGGTAGGG	360
CAGAGTGAT CCATGGAGGT ACCATGAGCT ACCATGGAGG TAGCTCAGAG AGGAAAGGGA	420
AACCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

CTCGAGCTGT TCTGTAAATA CCTGGTGCTA ACATCCCATG CCGCTCCCTC CTCACGATGC	60
ACCCACCGCC CTGAGGGGCC GTCCTAGGAA TGGATGTGGG GATGGTCGCT TTGTAATGTG	120

CTGGTCTCT	TTTTTTTTTC	TTTCCCTCT	ATGGCCCTTA	AGACTTTCAT	TTTGTTTCAGA	180
ACCATGCTGG	GCTAGCTAAA	GGGTGGGGAG	AGGGAAGATG	GGCCCCACCA	CGCTCTCAAG	240
AGAACGCACC	TGCAATAAAA	CAGTCTTGTC	GGCCAGCTGC	CCAGGGGACG	GCAGCTACAG	300
CAGCCTCTGC	GTCCTGGTCC	GCCAGCACCT	CCCCTTCTC	CGTGGTGACT	TGGCGCCGCT	360
TCCTCACATC	TGTGCTCCAT	GCCCCTAGGC	CTCTTTGGCC	GAATTC		406

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCGGCC	AAAGAGGCCT	ACGCCCCGCCA	ACACGCCTGG	GTAATTTTTT	GTATTTTATAG	60
TAGAGACGGG	GTTTCACCGT	GTTAGCCAGG	GTGGTCTTGA	TCTCATGATC	TCGTGATCCA	120
CCTGCCTCGG	CCTCCCAAAG	TGCTGCGATT	ACAGGCAAGT	GCCACCGCAC	CCGGTGACAC	180
TGTTGCTCTT	AAGCAGAAGC	AAAATCAAAA	GGCAGACAGG	ACTCAAAGAA	TGTTTCTAAA	240
CCTAAAAGTA	CTAAGGCCTC	TAGGAAGTAT	GATGATGACA	ATTACTGTGC	AATTTATATC	300
ATGCTGAATT	TTAGTAAAAC	CCCTGGCAAA	CCACTCTCAC	TTGGTGACAC	TCCGTCCACA	360
GCACGGGGCC	ACAGCATAGT	GGATCAGTAC	AACTTTCCTG	GACAGCCTTG	CTACCTGTAC	420
ACTCTTATGG	ACTCAATTCC	ACTTCAATGT	ATTGCTTCTA	GAGGTAAATG	GACATGTGAA	480
CACAGATTCA	CAGGCAAAGA	TGTTTATATG	CACCACTGTC	TTGATGTTCA	AGAAAATGGA	540
ACTGGTTACA	TGCATGTGAT	TAGCTATATA	ATGTAAGTGT	ATTCAGCCCC	TAAAAAATGT	600
AGGCCTCTTT	GGCCGATTGA	ATTCTAGACC	TGCCTCGAG			639

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 606 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTCC	AACGGCATCG	ACGTGTACCC	CCAGAAGGAA	60
TTTGATGAGG	ACTCGGAGGA	CCGGCTGGTG	AACGAGAAGT	TCCGGGAGAT	GATCCCATTT	120
GCTGTGGTGG	GCAGTGACCA	CGAGTACCAG	GTCAACGGCA	AGAGGATCCT	TGGGAGGAAG	180
ACCAAGTGGG	GTACCATCGA	AGTTGAAAAC	ACCACACACT	GTGAGTTTGC	CTACCTGCGG	240
GACCTTCTCA	TCAGGACGCA	CATGCAGAAC	ATCAAGGACA	TCACCAGCAG	CATCCACTTC	300
GAGGCGTACC	GTGTGAAGCG	CCTCAACGAG	GGCAGCAGCG	CCATGGCCAA	CGGCGTGGAG	360
GAGAAGGAGC	CAGAAGCCCC	GGAGATGTAG	ACGCCACCCT	GCCCCCCCCC	GGGATCCTGC	420
CCCCAAGTCA	TTTCCGTCCC	CCCCCAGGC	CCTCCTCCCA	CGGAGTGGCA	AGACTGGCTG	480
AGGCCTAGCT	CTCTAAAACG	GTGGGGGAGG	GGGGAGCGCC	CTGAGAGAGG	CATTCTACTA	540
ACCCACCCCC	AATCACCCCT	ATTTTACTC	TTTCTACTTT	CGGAATTGGA	AAGAACGACA	600
CTCGAG						606

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC AAAGAGGCCT AGGAGTGATG TTCATTTTGG GATTTGCAGG GTGCATTGGA	60
GCGCTACGGG AAAACACTTT CCTTCTCAAG TTTTCTCTG TGTTCTGGG AATTATTTTC	120
TTCTTGGAGC TCACTGCCGG AGTTCTAGCA TTGTTTTCA AAGACTGGAT CAAAGACCAG	180
CTGTATTTCT TTATAAACAA CAACATCAGA GCATATCGG ATGACATTGA TTGCAAAAC	240
CTCATAGACT TCACCCAGG ACTCGAG	267

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC AAAGAGGCCT AGTGTTTTCC AATCAAGTTA ATAAATATCT GTCTTCGTAC	60
CAGGAAAAAT TCAATATTAT TTAAAGGAG AAAAAATAAG AATGTATTGG TAAAATGCTT	120
TCTCTCACTT CGAAATATCT TAGTGAACAA GAACACTGAC ATAGAATTAA AATTCTATGA	180
ACAGCCATAA CCAAAGGAAT CTCATTTAGT GAATATTAT GTCCAGTAAC TGCAACCCAC	240
ACTTAGAGCT ATCCTTTTGC TTAATAACAA AAATTTGGGC CTTAAGAAGT GATTAATATC	300
AGGCAAAAAT AAATTATACT TTGTTTATT TATTCAGGGC CTTGCTCTGC TGCCAGGCT	360
GGACTGCAGT AGTGCAATCA TAGCTCACTG CATCCTGAA TTCCTGGGCT CGAG	414

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCGGCC AAAGAGGCCT AGTGAAGTTT ACTGTGATTC TATGGAACAA TTTGGACAAG	60
AAGAGTCTTT AGACAGCTTT ACGTCCAACA ATGGACCATT TCAGTATTAC TTGGGTGGTC	120
ATTCCAGTCA ACCCATGGAA AATTCTGGAT TTCGTGAAGA TATTCAAGTA CCTCCTGGAA	180
ATGGCAACAT TGGGAATATG CAGGTGGTTG CAGTTGAAGG AAAAGGTGAA GTCAAGCATG	240
GAGGAGAAGA TGGCAGGAAT AACAGCGGAG CACCACAAC CGAG	284

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGATT GAATTCTAGA CCTGCCTCGA GCCTGTGCGA GAAAAGTGAA CGCCAGTCTA	60
AAAAAAAAAA AAAAATCTAA AAGAAGCCAA AAATCCACTT GTAATGAGAT TCATAGACCC	120
CTTATTTATA CAACTCACAT ATTTGAATTT TTACATATTG AATTTTCTTT TAAAGGGGTG	180
GAGGGGTCTC GAG	193

(2) INFORMATION FOR SEQ ID NO:1303:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC TTCATGGCCT AGGGATACAG CAACTATTTT ATCAATTGTT TGTATTCCCG	60
TTTAAGGTAA CATTTTAAAT GAAATGTATT ATATTTTAAAT CTATCCTTTT CCTTTGTTTT	120
TGTTCTTATT ATCTCTTCTG ATATATAACC AAAAAATGAA AAAATCTGTA CACTTGGTGT	180
TTGATTTACC TAAGCACCTA GTTAATTTAA TCTTTGTAAC ACTTTGGATG GTTAACTTAA	240
CCTTTACTCA AGTTGGTTTT TGTTTTGTG AAAATGACTT ACTTGGTGA ACCACTACTC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:1304:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GCAGCGAGCA GTATACCAGC AGCAGCAAGC GAAAGGAAGA GTTGCTGAT ATGTCAAAAG	60
TTCAATTCAGT GGGGAAGCAAT GGGCTTCTGG ACTTTGATTC AGAATATCAG GAGCTCTGGG	120
ATTGGCTGAT TGACATGGAG TCCCTTGTGA TGGACAGCCA CGACCTGATG ATGTCAGAGG	180
AGCAGCAGCA GCATCTTTAC AAGCGATACA GTGTGGAAAT GTCCATCAGA CACCTGAAAA	240
AGACGGAGCT GCTTAGTAAG GTTGAAGCTT TGAAGAAAGG TGGCGTTTTA CTACCAAATG	300
ATCTCCTTGA AAAAGTGGAT TCAATTAATG AAAAATGGGA ACTGCTTGGG GTATTTGCAT	360
TTTTATTACT GTTTGTAGGT TATGTGTACA TTTTTCGCT AGTGAAGTCA CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:1305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	TTCATGGCCT	ACCAATGTCC	TGCACATTGC	CAGACTTCCA	AACAGGTACA	60
AGTTCCCATC	TGTTCTGCAA	TAGATGAAAG	CAAGTCACAG	TTCCCAGGGC	TACCAGTGTA	120
ATTTCTCAAG	TGGCCAAGTT	ACCTGGCTTC	ATGGCTTGAC	CTGCTGTGTT	CTTTTGAAAA	180
TGGAGAATGC	CTGAGGGCTG	TCTCTAACAG	AAGGGTATGT	GGCAGTATAT	TACAGAATTT	240
ACAAGAAGCA	AGGTGCAAAT	GAATTACATT	GAATTCATT	GTAAAGAAGA	GATGATTAA	300
AATTTGGTAT	TTAACACAT	AAACGACTTT	GGGGCCCAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GATTTCTCTC	AGCTTTTATT	TGTTTGAAAA	ATTTTTTAAT	TCACCTTCTT	TTTTGAAAGA	60
TTTTTACTGA	TTATAGAATT	CTAAGTAGTT	TATTCTTCTA	GGACTGTGAA	CATATAATTC	120
TACTGTCTTC	TGGCATTAT	AGTTTCTTTA	TTTTATTTT	TATTGAAAAA	CATTTTTTTT	180
GAGACATGGT	CTCACTCAGA	ATACTCGAG				209

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC	TTCATGGCCT	AAGCTTTTGC	TTTTTTAATA	ACTTGTATAG	CTAAAAACTT	60
GACGGTGAAA	AGCTCTCAGA	TCAAAGCTGA	TCCTTCTGTC	AGTAATGATT	CTAAAAATAA	120
GCAAGATTTT	AATGGGGAAT	ATATTTTATT	TCATTCTTAT	CTCAAACCTA	GGTACTGTGG	180
TCGTTTGTAG	TCATTTCGA	GGCATTTCAT	ATGTGCCTCA	GGCCACATCC	AACCTCTCCC	240
CAGAACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GAATTCGGCC	TTCATGGCCT	ACCTGACTCT	TGAGATACTG	ACTGGAAGAT	AGACTGTTTT	60
GTTCCACCTG	ATTGTATGGG	AGAAATTTT	GACCTTAGAA	AGTGGAATG	AGGTTGCTAT	120
GGAAACTGGT	AATTCTGCTG	CCACTCATAA	ACTCTTCTGC	AGGTGATGGT	CTTTTAAGCC	180
GTCCTATTTT	TACTCAGGAG	CCACATGATG	TCATTTTCC	TTTGGATTTA	TCAAAATCTG	240
AGGTCATCCT	GAATTGTGCT	GCTAACGGTT	ACCCTTCGCC	TCATTATAGG	TGGAAGCAAA	300

ATGGCACAGA ACTCGAG

317

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

```

GAATTCGGCC TTCATGGCCT ACACAGTATC ACTAAAAGAT TTTCAATTCGG AAGATCACAT      60
TAGTAAAAAG ACTGAGGAAG TGGTTCTGAA AGATGGAAGA ATTGAAAGAC TAAAGTTAGA      120
GCTTGAAAGG AAAGATGCTG AAATCCAGAA GCTGAAAAAT GTAATCACTC AATGGGAGGC      180
AAAGTATAAG GAAGTAAAGG CAAGAAATGC ACAATTATTG AAAATGCTTC AGGAAGGTGA      240
AATGAAAGAT AAGGCAGAAA TACTTCTGCA AGTTGATGAA TCACAAAGTA TCAAGAATGA      300
GCTCACTATT CAGGTGACTT CACTTCATGC TGCATTAGAA CAAGAAAGAT CTAAAGTGAA      360
AGTATTACAA GCAGAGTTAG CCAAATACCA GGGTGGCAGA AAAGGGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

```

CTCGAGTGTG GTGGTATGTG AATTATATCT CAGTAAAGCC ATCACAGGGC AGAAGAAAAA      60
GAGAAAAGAA AAAGAAAACC TTCGAGGAAG TCCAACAAAA AACATGAGGA AGAAAAGGTG      120
AGAGCCTGAG GATCCACACA GCAGGTACAG CAACTAACTG ACAGAAATTC TAGAGCCAGA      180
CAACAATGAC TAATCAAAC TAACTCAAAA CAAATGATTA GGCCATGAAG GCCGAATTC      239

```

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

```

GAATTCGGCC TTCATGGCCT ACAAGGAAGC ACAAGGAGAA AATTATGATG AAATGGAGCA      60
AAACAGGTAA GAGAGAGGGT CAGAGAAGTG AATGTGGGCC TTGATGCTGA AGCCATTGGA      120
GGGTTTTCTG TTGAGGAGGA GTATGGGAAT GATATGATCT GACTTATGTT TCAAAAAGTG      180
TACTCTAGCT GCTTTGTGGG AAATATNGGA GGGAGAGAGC AGAATCAAGG AGGCCATTTA      240
AAATGCCATT GCAAATATCC AAGAGAGGCG GACTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:1312:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

```
GAATTCGGCT TCATGGCCTA ATCACATATG GTAGAGATTT TATACAGAAT TTAAAAATGT      60
GGCATTAAAA AAACCTTGTC CATGGAAAAC TGCTTTCAGA GATTTTAAAT AAGTGTTTCT      120
CTCACATAGG AACCTAAGCT TCTCAGAGCT TTTAATAGGC TTCTAACAGG CTAATAGTCA      180
AGGCCGTGAC CCAAGAAGGG ATATAGTTCA CAGTGTTTTC CACAAATATT TCACCCGAGA      240
GCTCGAG                                           247
```

(2) INFORMATION FOR SEQ ID NO:1313:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

```
GAATTCGGCC TTCATGGCCT AGGGTCTTAG CTTTGGCTCT CCTTGCAAAG TTATTTCTAG      60
TTAATTCATT ATGCAGAAGG TATAGGGGTT AGTCCTTGCT ATATTATGCT TGGTTATAAT      120
TTTTCATCTT TCCCTTGCGG TACTATATCT ATTGCGCCAG GTTTCCTCTG TCTCAAAAAA      180
AAAGAAGTTA CTTCCAAGAC AGACTTTTAA GATGTAACCA GCACAAAGCA ATGTCAGGGA      240
GGAGTGATAC ATGACAATAA ATGAGTCAGA TGAGCAAGAA GGCCCCAGAA CCCATGCCCC      300
CAGGACTCGA G                                           311
```

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```
GGGGAGCTGC AAACGCCCCG GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA      60
GATCAAGAAG ACGGGAACAG CACGAGGCAC TGGGAGCTGC AAACGCCCCG GATACTGTCA      120
GAGATGGAGA AAGGTATGAC AGGAAGAGCA GATCAAGAAG ACGGGAACAG CACGAGGCAC      180
TGGGAGNTGC AAACGCCCCG GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA      240
GATCAAGAAG ACGAATCGA G                                           261
```

(2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

CTCGACTTGC	ACGAGGAGTG	GCAGGATTAT	CTGCAGAGGG	ACCATTGGGA	CAGCTAGTAA	60
GGCCAGGTGC	TCTTTAGGCA	CCCCTTCTTC	CACCAGCTTC	AGGCCTGTCA	CAGCATCAGC	120
TGCTGAGAAG	CCAATCTTTG	ACGTTAGAAT	CAGAAGGCAA	AAGGCCAGAA	CTGCTGGCAT	180
TTTTATAATT	GAGAATAGCA	GCTTGTAAGT	GTCTGTGATC	CCTTGGGTCT	CTTCTTTTAC	240
TATTGACGCT	TCTCTGTTTT	CTTTTTCAG	AAGGGCTACT	AATGTTGTTG	TTATTAAAAA	300
TACAGTAGGC	CTCTTTGGCC	GAATTC				326

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC	TTCATGGCCT	AACGTCCTC	ACTGTCCTTC	TTAGTATCTA	ATTCTCCTTC	60
ACCTAATAGA	ACAGCAAATT	CTTTGAGTTT	AGGATCCTTA	ATGCAGTGTA	AATATTGCCT	120
TTTATCCTTC	TTCTCAGCTA	TGGTCTCAAT	TCAAATCATG	AGGACCATTG	TGGTGGCTCC	180
CGAATGGCCT	CACTGTTCCA	CTCCTTCCCC	ACTGCGCTAC	AGTCCATTCC	CCAGTGTCTC	240
CGAG						244

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC	TTCATGGCCT	AGAAAGGTTT	GCCTGGTAAG	ACTGAACTGT	TCATAGTTCT	60
TTAAATAAGC	TACAATATTT	CCTAATTGTG	TACCCTTGAT	TTTACTGTTT	TCTTGCCCTA	120
GAATGCTGTT	TCTATCATTC	TTCATCGAG				149

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAA GCAAGGGGAG GCAGACCACA GGCCCTCATGA      60
CTCTCACTGG AGTGCAATGG GACCCCATG GGGTGAAAGC AGAGGAGTGA GCTGCTCTGA      120
TGTGAGCACT CACTCTGCTT GCCATATAGT GAGTAGACAG GAGAGACCAG GGCAGAAGTA      180
AGAAGACCCA TCAGAGGCTC CTCAGGAACC CGAGTGGGAG ATGGTGGTGG AACAGGGTTG      240
TAGTAGTGGC AGTAGTGAAA AAATGATCAG GTTTTGAAA TATTTGGAAG GTCGAACTCG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAAA GAAAGAAAGA AAAAAGAAAG TACAAGTTTA      60
TAAAGTATTA TAGTGAAAAA TTCGCATTCT GGCTGATTTT AAGCCATTTA AAATTTATAT      120
AAAACAACCT TCCATAAAAA TTTGACAGGT GCCCAGATGT TGCTTCTCC ATTATTTT      180
TGTTTTTTTT TAATCACAGT GGTCTTGAGG CAGGTCGAG                                     219

```

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTAG GTTTTATTAA TGCAGTTTTT ACAGATGAGG      60
CTACTGTGAC ACAGAGGGCA TAAACTTGTC AAAGACATGC AGCAAACAGG ACAGACAAAT      120
CTGAAGCCAG GTTGTCTAAG CTCAGAATCC ACACCTATAA CCGCTGTACC CCACTGCTTT      180
TGCCAGCAGG AGCTCACGTA CTTAGGACAG ACAATCAGTA CAGTGCTAGG CTCACTGAAG      240
GTGTTGAACA AATGTCTGTT CACTCTTTTT GTTCTCAAAA GTACCAGGAA AGGCCAGAAG      300
AAAAAACTAC AAGACTTAGA AACTACAATG GATCAGATCA CTCAGTAGCA CCTCACTCGA      360
G                                                                                   361

```

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCAAAC GAAAGCCAGC TGAGAATACA GGAACATGT TTCCAGCCAA ACCCAAAACA      60
CTCGAG                                                                                   66

```

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GATTGAATTC TAGACCTGCA GCTACAGAAG TCAAGATTCC AAAACCAAGA GGCAGACCCA      60
AAATGGTAAA ACAGCCCTGT CCTTCAGAGA GTGACATCAT TACTGAAGAG GACAAAAGTA      120
AGAAAAAGGG GCAAGAGGAA AAACAACCTA AAAAGCAGCC TAAGAAGGAT GAAGAGGGCC      180
AGAAGGAAGA AGATAAGCCA AGAAAAGAGC CGGATAAAAA AGAGGGGAAG AAAGAAGTTG      240
AATCAAAAAG GAAAAATTTA GCTAAACAG GGGTTACTTC AACCTCCGAT TCTGAAGAAG      300
AAGGAGACGA TCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCATGGCCT ACTGTAAGGA GGAGATGAAA GAATTAGTAG AAAAGGTTTT      60
AAAAACAGTT ATTATACTA TATTCCATAT GCTGAAGGCG CTCGAG                      106

```

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT ACTCCTTTAT TTCCTTTGTC TGTAAGATAA AGTCTTAGAA      60
TAATATTCTT GTTAAGGCCC TGCTTATCCC AATACCGTAT CCATACTGAA CTTTCAGTTC      120
TTTATATGCA CTCTACTCTC TGTCTTTCAG ATTTTTCGAG GTATTCCTTT AGAACACTCT      180
TTCTCTTCCA TCTTATCGCC TACTCTTTGG GTTCTGTTT AAACATTACA TTTCTCGGTG      240
GGGGGGCTTA TCTCGAG                                     257

```

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```
CTCGAGACCG CAAGCACTTC CCACCTCATC CTTATTCCT CTATCCCTTT TCATTGTTTT 60
TTTCTCCTTT TTAAATTC 78
```

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

```
GAATTCGGCC TTCATGGCCT AGAATTGTCC TCTGTGGAAG GGACTTTCTT TTGGCCCTAG 60
GCCCCTTCCT GCCCTGTCTG TCAGCAGAGA GATGGAAAAC TTGATGACTA GCTCCACCCT 120
ACCGCCCCTT TTTGCAGATG AAGACGGTTC CAAGGAGAGT AATGATCTGG CTACCACTGG 180
GTTAAATCAC CCAGAGGTTC CATACAGTAG TGGCGCCACA TCATCCACCA ACAATCCAGA 240
ATTTGTGGAG GATCTCTCTC AAGGTCAGTT GCTTCAGACT GAGTCTTCAA ATGCAGCAGA 300
AGGCACCTCG AG 312
```

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

```
GCGATTGATT CTAGACCTGC CTCTCCTTCA AGCATTGCAG CAAACAATTG TACTGTGAAT 60
ACGTCATCAA TTGCAACGTC TTCAATGAAG GGTCTTACGA CTACAGGAAA CTCGTCTCTT 120
AATAGCACAT CTAACACTAA AGTATCAGCA GTGCCTACAA ATATGGCTGC CAAGAAAACA 180
TCTACCCCA AAATAAATTT TGTGGTGGT AATAAGCTGC AGTCAACAGG AAATAAGCA 240
GAAGACACAA AAGGAACCGA ATGTGTTAAA AGTACTCCTG TCACTTCTGC TGTGCAGATT 300
CCTGAAGTAA AGCAAGACAC AGTGTCAGAA CCAGTCACAC CTGCATCTCT TGCTGCTTTA 360
CAGAGTGATG TGCAGCCAGT GGGCCATGAT TATGTGGAAG GGATACTCGA G 411
```

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```

GAATTCGGCC TTCATGGCCT ACTTTTTCCT TGGTCAGATC ACAATGCTCC TATAAATGTT      60
TCACATAACA TGCTTACTTG TGGGTATACC CTCCTTATCT CCTCAGGGGC TAATTTTGGG      120
AAGGGACTAC TGTCTTACT TTAAGTTAA ATATAAACTA AATTCCTTCC CTAGTTAGCT      180
CAGCCTACGT GCAGAGATAA GCAAAAGTAG TTAACCTAAA AGATATCACC CTTTGGGGGG      240
TGTCAGAGGC AAAATAGAGT CAGTCATGCT AAGCTCCCCT CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```

GAATTCGGCC TTCATGGCCT AGGGGGATTG AAGATTTTTT GTAGGTGGAA GGCCTGAAGT      60
GCGACTAGAG GGCAATAAAT TCAAGGTGGG AGACTGTCTG CTGATGTTCA TTCCACTGGG      120
CTGTTTATGG ACTGGGCTGT TAGTGTGGGA GTGGCTACCC TGGGCAACTA GTGCATTGGG      180
ACTGGAACCTA CTTGGGGATA CAGTAGGCTT GGGAGTTGGG TTGGATTAG AAATAAGTTT      240
AGTTGATACT GAAGGCTTAG CTGACAGAGA GGGCTTGGGT GAGGCAGAAG GCTTAGGCGA      300
GGGCAGGGGT TTAGGAGATG TGGCAGGTCT AGAATTCGAG                      340

```

(2) INFORMATION FOR SEQ ID NO:1330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTAAAGA GGGCGATATC ATCACACTCA CTAACCAAAT TGATGAGAAC TGGTATGAGG      60
GGATGCTGCA TGGCCATTCA GGCTTCTTCC CCATCAATTA TGTGGAAATT CTGGTTGCCC      120
TGCCCCATTA GGATGTTATG CTGGCTGGCT CGCCTCCTCT TGACCCAGAT AGTTACGGTT      180
AACCACTGCT TTGGCAATGC TGCTTATAAC ACATCCCAAG TGCAAGCCGC AGTGGTCCAC      240
GTCATCCAGC CCCACCAAGT GACTTTGGTT GACTTGTGGG CTCCACAGG ACTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:1331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

```

CTCGAGTCCG CTGAGCTGAG AAGCACTGCG ACTTTTCCGT GACAGACCAA CGATAGCTAC      60
CATTTTGGCA CCAAGGCTAG AGCGCCGCTT TTTGCCACTG GTGCCCAAGG TGCCCACTGC      120
AGTGTGAGAC TGGCTGCCAT CATTCTTCTC CAGTGAGCAC ATGTCTCCAC TGATGCTGGT      180
GCTTTTGTG ATGTTCTTCC CTGATATGCC CATTTGTCTG CTTTGCATTT TGGATGTAAA      240

```

GACACTGTCA GCCGATGGAT CATTAAAAGT GAGGACAAGA GTAAAAAGGA AAAGACAGAA 300
AATGCATTTT AGATAAAACA TTTGAGTAT AATTAGGCC ATGAAGGCCG AATTC 355

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGGCC TTCATGTGCG GTGAAGGTCC TGTGATTGTA CAGTTAGCAC ATTTTATATG 60
ACAGTATAAT CTTAAAAAAT AACATAGAAA CAGAAACATT AGAAACGTAA GTCACAGTTT 120
GTGAGTATGT CATTTTT TAG GAAAAAATAA AATATAGTAA CGATTATGA GGGCCCAAAG 180
TTTTATATAA AAATGAAAA GCTGTTTGGC AGTTAGGACT GACTGTAGCC TTCTGTCAAA 240
TCAGTCTTGA CAACTGTAA AAGACATTAT CATCAAAAT AGGGCTGCAT TTCACTCTGT 300
CTGTCAAATA CAATCAATAT ATATGACTTT AAGAAAGTGT GACCATTTTC CCAGAGTGAC 360
ACCAACAAGA TGGTGAATA GGAATTTTG TTTAACTTTA CTCACCTCAC AGAAATCCAA 420
CTAGCAACTA ACCTCGAG 438

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCTAGC CCCACCCACT TTCTCAGACA TCCCACCGG AGGATCCCAT CAGTCACAAT 60
CCTCACTAAT TAGACCATT CAAATCCCCA AAATAAAAAA AGGGAAAGAG GTATAGACTT 120
ATCTTAAGGG TCTTAAGTTC TGGCATT TTTT CTATTTAATA ATATATATTG CTATAAAATG 180
GAATTACTAC CAAAATTTAG AAAATCTTTT AGCAGAAGAT ACAGCCCTAA TCTTACCCT 240
CCAGTACAAT CATTATTGAC ATTTATGATG TACTTCGTTA TAGTATCAAA ACAATTCCAG 300
TATGTGAAC 309

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GCGATTGAAT TCTAGACCTG CCTCGAGCTG CCGTGTTTTT CATTTTAATT GTGTGACATA 60
AAATGTAAAA TGTACCCTCT AAACCATTTT TTAGTGTTCA GTTTGTGGT ATTAAGTACA 120
TTCACATTAT TGTGCAACCG TCCCACCAT CCATTCACAG AACTCTTTCA ACTTGCAAAA 180
CTGAAACTGT ATGCATTAAG CAATAACTAT CCCTTCCTTC TTTCTCTTC CCCAGAGCTC 240

GAG

243

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

```

GAATTCGGCC TTCATGGCCT AATTCTGGGA AACTGAGAG AAAAATCTGA GGCCATCCAG      60
AAGGAACTAG AACAGACCAA GCAAAAAACA ATCAGTGCGG TTGGTGAGCA GCTCCTGCCC      120
ACAGTCGAGC ACCTCCAGCT GGAGCTGGAT CAGCTAAAGT CAGAGCTGTC CAGCTGGCGA      180
CACGTGAAGA CCGGCTGTGA GACAGTGGAT GCCGTACAAG AAAGAGTGGA CGTGCAAGTC      240
AGAGAAATGG TGAACTCCT GTTTCCGAA ATAGTCGAG                                280

```

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAAT TCGGCCTTCA TGGCCTAGAC      60
TAATCTTACT GTAGAAATGA TGTGAGATTG TTGTTGACT ATTTTAGAGC AGATTCGGTA      120
TCTAATGGGA TTCCATCTTG ATGTACAGAG CACCTTCTAC ATAATGAATT TTGCATTTCA      180
GATGGATGAA GCCTTTAACA CAGACAGAAT TTTAAGTATT GCATATTTCT GGAAGAAAAC      240
CATTGATCAC ATCCTCCTTA GATATTTAGT AATACCTCGA G                                281

```

(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```

GAATTCGGCC TTCATGGCCT AATATTTAGG TAAAAAGGTA AACTAGTACA CCTACCAGAA      60
AAGATAAATA TTAATTTATT GCATCTCTGA CATGAGAAAA AAAGCCTTTA TGTTTACTG      120
TTTTTTTCTA ATTTTCTTT TTCTTTTTTT TTTTCACATG AATGTTCTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCGGCC TTCATGGCCT ACTGTATTTT ATAGTGAAGT GTTCATAAAC TAAAGAGTCA	60
TTGATTTGGT TTCCTGGCTA ATTAAATCT GAATTCCATT TGAAGTCCA TTGAAATCAT	120
GGTTTTACTC TATAGCAGTG GATGTTTTT CCACACCTTT CTGATATTTT TTTCCTTCCT	180
GAGACAGGGT CTGCTCTGT CACCTGGGAT GGAGTGTAGT TGCACCAAAC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 148 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTCGGCC TTCATGGCCT ACTGTTTTT AAAGGCATAT GTTGTTTTAT TGTGCTTCAC	60
AGGTACTGTA TCTTTTTTA CAAATCTAAG TTTGTGGCA ACTCTGTGTC AAGCAAGGCT	120
ATTGGCCCCA TTTCCCAAC AAGCACGC	148

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GCCTGTGTGA AGTTTGACT TTAATCTACC AGATCACTCC TTCACCCTCC ATAAAGATGT	60
CTGAACCTGA CACTTCCTCA GGATTTTCGG GAAGTGTGGA GAATGGAAC TTTCTGAGC	120
TGTTTCCAC ATCCCTGTCC ACGTCAGTGG ACCCATCCTC AGGCCACCTG TCAAACGTCT	180
ACATCTATGT GTCCATATTC CTCAGCCTTT TAGCGTTTCT GCTTCTGCTT TTAATCATTG	240
CCCCCAGAG GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 259 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:


```

GAATTCGGCC TTCATGGCCT ACTATAAAGT ACTCTCGCTG GTATTGTCAG TATGTGTGTT      60
AACACAATA CTTGGTTGTA TATTTGGGTT GAAACCAAGC TGTGCCAAAG AAGTTAAAAG      120
TTGCAAAGGT CGCTGTTTCG AGAGAACATT TGGGAACTGT CGCTGTGATG CTGCCTGTGT      180
TGAGCTTGGA AACTGCTGTT TAGATTACCA GGAGACGTGC ATAGAACCAG AACATATATG      240
GACTTGCACC AAACTCGAG                                         259

```

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

```

GAATTCGGCC TTCATGGCCT AGTCCTTGAC TCTGGAGTTT TACAAAGCAG TCACATTTC      60
AATAAAAGTC TGGGAAAGCA ACACATCATC GCCAACTTTT AATTTTGCTA AATAAGGATA      120
TTAGAAAAAG AATAGAAAAT TGCAGTCCCT TACTGTTTAA AGAAAAACCA AAAGAAGTTA      180
AAAAAAAAC AACCTCATTG TGTTGTCTTT GTTTTGTGTT TGTTCCTTT CCTTGAAAT      240
CAGTGAAAGT TTGGTCAGCC ACCTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

```

GAATTCGGCC TTCATGGCCT AGCCATTTAA TATACTAAAA CAGTGTGTTA AATTAACTT      60
GGTACAAATT GCCAGTCATC TCTAGATCAT TTTAAGCATT TTAAGAATAT TTATTATCAA      120
TCTAAGTACA GAAGAATAAC TGCCAGCAGT GATTATTTGC TTTGGATTAG AGTTTTTAAA      180
AATCCACCTC ACTGAAATGG TTATGTTTAT CACAGTTTGC AAGGTTTGTC TGTTTCTCGA      240
G                                         241

```

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

```

GAATTCGGCC TTCATGGCCT ACCCATTCCT TCCTTCCTGC CTGGCCTGGG CCCCTCCTGC      60
ACAGATGGCC TAGGTACCCA GCCTGGAGGC CAAGGCTGGA TTCCCAGAGT CTGCCCTGGT      120
GGAGTGGGAA TAGCAGGTTT TCTGCAACTC AGGGGAGCTG CCCTGCAGGG CTTCCCATAT      180
GTGCTCAGGC CCCTGTGCCA GGTCTGGTGA TGCTTCCTCC TTGCCTTTCA GGATCTCCTA      240
TTGCACAGCA GACAAGATGC ACGACAAGGT GTTTGCATAC ATCGCCAGAG GCCAGCACAA      300

```

CCAGAGCCTC GAG

313

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

```

GAATTCGGCC TTCATGGCCT AGGCTTCTCT TCTGAATTGA TTGGTAGTGT TGTATTTC      60
TTGTTATTCA GTTTAACAAG TACATAATCA ACATCAGTGC TTGGGAAGTC AGGAGTACGA      120
GAGATAAATA AGAAGTATAT GATCTTTTCT CTTATTTTCT CTCAGTATAA GTTGACCTG      180
TTTTCCCTT CATCTCTTTT TCTTCAAGAA CATAATATCG GCTGAAGTGG AATGAGTATT      240
CAAATTGTCC AAAAAAATAT ACAAGTGAGG GAATTAATAA AATTTTTTGT AATTATAAAT      300
ATGTATATAT TGGGGGGCAG TCTCGAG                                         327

```

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

```

GAATTCGGCC TCATGGCCTA AATCCTTGA AATACAATGA GACTCATCAG AAACATTTAC      60
ATATTTTGTA GTATAGTTAT GACAGCAGAG GGTGATGCTC CAGAGCTGCC AGAAGAAAGG      120
GAACTGATGA CCAACTGCTC CAACATGTCT CTAAGAAAGG TTCCCGCAGA CTTGACCCCA      180
ACACTCGAG                                         189

```

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

```

GAATTCGGCC TTCATGGCCT AGTGGGCTTC AGGAAAGCAA AATATAAATA TTATGGTTAA      60
AGAATTTATA ATTAAGATTT CACCCATAAT TCTTAATACT GTGTGACAA TCATGGCTGC      120
ATTGTCTCCA AAAACAAAAG AAGATGGATC CAAAGATACG TCTAAGGAAA TGGAAAATCT      180
TTGGGGTATC AAATCGATTA ATGATTATAA CACTTGGTTT CTTGGTGTTG ACACGGCAAC      240
AGAAATAACG GAAAAGCTCG AG                                         262

```

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGGCC	TTCATGGCCT	AGTAATGTTA	AAACAAACGA	AATAAAAATA	GAAGGAAAAA	60
CTTTCTGAGT	TTCAAAAACA	ACAGACTAGT	ACTCTAAAGA	ACTCTTTAAA	ACAATTAAC	120
GTTAGGATTG	CAGTTATGAT	TGGATATTAT	TTAATTCTGT	TTCTGATGTG	GGGTTCCTCC	180
ACTGTGTTCT	GTGTGCTATT	AATATTTACC	ATTGCAGAAG	CTTCATTCAG	TGTTGAAAAT	240
GAATGCTTAG	TGGATCTGTG	CCTCTTATGC	ATATGTTACA	AATTATCTGG	AGTTCCTAAT	300
CAATGCAGAG	TTCCCTCCC	CTCCGCGCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGGCC	TTCATGGCCT	AGGAAGACAG	ATTTACACAGA	GAGTGGGTTT	CATGTTAAAT	60
GTCTGATTTC	CTTGTCGGAT	CCCCCACA	GGACACTAGG	TTTTGTGGGC	CAATGTGTTA	120
TGTGTGTATG	TAGGCAAGCA	GGAGGGGGTG	GGTGGGCTTC	TTTTTTTTTC	TATTTTTTTC	180
TTTTCTTTT	TGGTTGTGGA	AGAACCACGT	TAACCCCTCT	AATTTCTTTA	AAAAGACATA	240
AGGTTTGAAA	AGGAGATTTT	AGGAAGAAGC	AAAAGAAAAA	AAATGGGATA	CATATATTGC	300
ATCTGTAATC	CAATCAAGCT	GTCACCTGAAG	ACAAACTTGA	TCTCTGTTCT	CACCAGTTGA	360
CACACTCATC	AGGCTATAGG	TCAACTCTAA	GTGTGGTGAC	AGGTGATGGA	CTCTATGCCA	420
ATTCTGATAC	TGAATTTTCT	TTTGCTTATT	GAAGCTTCAT	TTTGTGTGTT	TTAATTATGA	480
AAGTATAGTA	ACACCTACCA	TGCATACCAA	AGCAATATCA	ATATTTTCAA	ATGCATCTTC	540
CCCCATTCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 246 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGGCC	TTCATGGCCT	AGGTTTTTGT	TGTTTGTGTTT	TAAAGGAGTT	AGACATAGCC	60
TAACAAACTG	GAAATTGACA	TTTCCATCTA	TTTTTCTCCC	TTTTGAAGCT	AAATATGTCT	120
TGTTATTTT	GGTTCCTAGT	CCCCATTACT	ACTTATTTTC	TGATAGTTCA	TCCACAGCAA	180
CTTCAGTCAG	TTAGCTCACT	AGTTCTTATG	GCTAGAGATT	CCGCCAGTTT	TCCCTAAAA	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:1351:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

```

AAAGAAAAA TAAAAA AAAAAGGTGTA TGTGACACACAAGAAAAG      60
CAAATCAGTG TTGTAAGCTT AAAGTACAAT TTCAAAGGTC ATTACCAACA GCAGGGTTT      120
TTTTTACTT TAAAAACATT ATGCTACATA TCATTGCCAT TTCATATTT TGGGGTTTTG      180
CTACTCTTAT ACAATGGAAT CAATGGAAT GTCATCCAGC CAGATCTCGA G      231

```

(2) INFORMATION FOR SEQ ID NO:1352:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

```

TGAATTCTAG ACCTGCCTCG AGTTGCTCCC AGGAATAGTC CAAAGGAGCT GCTCTTGCCC      60
CTTTATACAC AAGCGCCAGC AACCAAAACC CTCCTCCTG GCAATAAGGC CTCACTATAG      120
TTGCCCTCAT GCTTCCTAAG CTCTCTCTTG CTCTAATAAC TCTAATTCTG GGCCAAGCCC      180
AAGAGTGCCA TTCTTTCTTC CTAGCTGGGG ATGGAAGCT GAGAGGGGCA CAAGGAGGGC      240
AAAAGTATCA CCCTATCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:1353:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

```

GAATTCGCCT TCATGGCCTA CTTTCAAGT GAATGATTG GTGTTGAAC CTCTTGATT      60
ACCTTAAGAG GGAAAAATGA AGGAGAGGAG GGAACCATCA TCACATACCT TTACAGTTGT      120
GGAATGTTAG CCCACTATAG TGTTAACTA AGGAAAATCT AATATAATAC ACTCCCAAGT      180
GATCTGAAAT GATCCGCTAT TCAGAATTCC AGAGAAAGAC ATATCCCTGC CAGAAGGGTG      240
TCCTTCATAA CCAAATTTGG TCTTCAGTCT GGTGGGTGCA TACTCAAACA GGAATCACTT      300
CCCTTAAGGA ACCTAAGGTA TGCAGTTGAG ATCAACTTAT TCCTTTTGA TTTGTCCTT      360
TAAAGCATCA ATCAGACGTG AATGCATCTT GTGACTTGGA GTTACTAGTA ATATTGAAAT      420
CTGAAACTTG GGGGATCTTT GAAGACACAT GGGATTAAAA GCTGCATAAT ATACATCTCG      480
AG      482

```

(2) INFORMATION FOR SEQ ID NO:1354:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGGCC	TTCATGGCCT	AATACCCAAA	ATTGGCATGA	CTACTTATAA	AATAGTGCCT	60
CCCAAATCCT	TGGAAATATC	GAAAGACTGG	CAATCAGAAA	CCATAGAGTA	TAAAGATGAT	120
CAGGACATGC	ATGCTTTAGG	GAAAAAGCAC	ACTCATGAGA	ATGTGAAAGA	AACTGCCATC	180
CAAACAGAAG	ATTCTGCTAT	TTCTGAAAGC	CCAGAAGAGC	CACTGCCAAA	CCTTAAACCG	240
AAGCCTAACC	TGAGAACAGA	GCATCAAGTG	CCCAGTTCTG	TGAGCTCACC	TGATGATGCC	300
ATGGTTAGTC	CTCTGAAACC	TGCTCCCAA	AATCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 203 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGGCC	TTCATGGCCT	ACTTTTAGAT	GCTTTACATG	CATAAATTCA	AATAATACAT	60
TAATAACCTT	CCATACATCT	TTCTTTGTGT	ACACGTTACT	ATTTCTGTAA	GATAGATTTT	120
TAAAAGTGGA	ATTTCTAGGC	CAAATGATTT	ACACTTTTTT	TGTTTGTTTG	TTTTTTTGTT	180
TTTTTGAGAC	GGAGTGTCTC	GAG				203

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 516 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGGCC	TTCATGGCCT	AGGAGAATCA	GGCAGGGAGG	TTGCAGTGAG	CCGAGATGGC	60
AGCAGTACAG	TCTAGCTTCG	GCTCGGCATC	AGAGGGAGAC	CGTGGAAGA	GAGGGAGAGG	120
GAGACCGTGG	GGAGAAGGAG	AANGAGGGGG	AGGGGGAGGG	GGGGAGAGGG	AGAGGGACAA	180
TGATGTCTTG	CTGTAGGTAT	TCTTCCCAT	TTGAATTTT	TCCTCAGCAT	TATTTTTTTT	240
AACATCATTC	AGTCTCCTCT	TATACTACAC	TGGATTGAA	TTTAATATCT	CATGAAGAAA	300
AAACATTTCT	ACTTTGAAGC	ATGTGAATTA	GCATGTTTT	ATAACAGCTT	TATTGAGATA	360
TAATTTACAT	ATATAAATAA	ACCGTTTAAA	GTCTATAAAT	CAGTGGTTTT	TAATGAGATA	420
TAATTTACAT	ATATAAATCA	ACCATTTAAA	GTGTATAAAT	CAGTGGTTTT	TAAAAATATTC	480
ACAATGTTGT	ACGACCGTCT	TCTCAGTCAA	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GAATTACTAA TCAAGAAAAA ACAAATCAC AAATCACTAC CAAAGCAGTT CATTGTCAAT	60
AATTTTTTTC CCTTGATTTT TTGTTTACTT TTTGCGAACC CTGAGCATACT ATCCAAGTTG	120
CCCTAAATAT ACGCACACCT GAGGTTGTCT TTATAGGAGC TTTATGGTTG CAAGTTTGTG	180
GTATAATCTT TAATCATTTT GAGTTGATTA TTGTGTATCT AGTACCATAA GAGTCCTGTA	240
TTATTCTTTT GCATATGGAT ATCTAGTTTT GGAAATCTTC CCCGTTGTGT CATTTTGGTG	300
GTGTTTTGAA AAATGTGTTC ATTCCATATA AATTTTGTGTT TATTATCGAG CACATTCATT	360
TTGCTCACTG GTCTGTGTTT CTCTGTGTAC GCCAGTAACC TCGAG	405

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 328 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

CTCGAGTCTG GCTTTGTTTC AAAATGATTA AGATTAAATG ATGAAATAAT ATTTTATAGC	60
CACGTCATTG GATACTTGGG TTGTTTTCAG AGCATCTTCT TATGACTAAA TCTTCTGTTT	120
CATTCTGTTT TAAATCTAAA AAGTAAATG ATGGTCACTT GGAATCTGCT CTATATTTTA	180
ATTATAGTCT CTCTGTGTTA TAAACAATAA CTTACACATA TTTTTCATAG TTTTAAGTAA	240
AGATTAAATA ATGCCATCTT AGAAAGGATC TGTTTAACCT ATATTATAAA AGTTAGATAC	300
ACAATTTTAG GCCATGAAGG CCGAATTC	328

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

CTCGATGGCC TAAGGCAGTC TCCTGGAAGC ATGACATTGA TGCCCTGGGC TCACCTCTTT	60
GTTTTGTTTT CCTTCCACTT TAGCGGGAAC CACATCTTCA AGGGCCGTGC TGCCGCAGTA	120
GCAGTGAATG AGAACGGCAA AGGCCTCATC ACAGGTACGG ATGGGAACTG CCTGGCACCT	180
GGCAGCCAGG CCAAGGTCCC CTGGCGTCAC CCCCAGCTT CAGGACCTCT AGGCCATGAA	240
GGCCGAATTC	250

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 206 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

GAATTCGGCC TTCATGGCCT ACGATTCTAT TTCCTTATCT GCTTGCAGAG CTATTTAAGA	60
ATCAATGTCT TATTTTTCCT GAGTCCTTTA TAACCCTATT CATAATTTCA ATTGCTGATG	120
CCTCTTTGAG CTACGAGTTC TACTTTGTGC ATAACGTTGA GGAATTTCTA CGTTTACTGT	180
TTTCCTTAC TTCACTCATC CTCGAG	206

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

GAATTCGGCC TTCATGGCCT AAGAAATCAA CGTTGAACCC TAATGCTAAG GAGTTCATC	60
CTACAAAGCC TCTGCTGTCT GTGGTGAGCT GGGACAGGAG AATGTGGACT TTGGTTTCTG	120
TGGGGAGACT TGGGCAGTGC TTATAGATGA ATAGGGGGAG GAACACTTCA CTTCCAGGAC	180
CACTTGCCTG GCAGGCAGTG TGAGGAGATG TCATAAAAAT GTAAGGATGG CACCTTTGGG	240
GCTGGCTTGG GGAAAATGGA CTCAGGTCTC TAGGTTTGGG TGATCAGGGA TCCAGTGAG	300
TCTGATGAGG GGTTAACAGG CTTTCTTTG GTTCTTGGCA TTTGGCTGAG GGAGTATTGG	360
AGTGGGGATA GCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

GAATTCGGCC TTCATGGCCT AGTTAAAGGC AAGTATGTCA TATTACTGAG GCTACAAGTT	60
AGTCAGCAGA TGAGTGCCAG TCCAGCCTTT TCTGGTATGT TATTGTTAGA AATATTGAGT	120
TCTAATGTTA CATCTGAGGA AGTATGTAAT TTGAGAATTG TAACTTCTAA GGGATTCACT	180
GCATCATAGC TATGCCTGTA TGGAGTCTAA CATATGACCA ATACCAACCC ATAATCCAGC	240
ATTGAATTCT AGACCTGCCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

GAATTCGGCC	TTCATGGCCT	ACCCCTCCCC	TAGTTCAGT	CCAGGTAAAC	AAAAATTGAT	60
TCTATTTTTT	CAAAACACCA	CCCCCTTCAG	ATGGCCTGGT	TAATCTTCAT	TAACATGTTA	120
TCTTCATTAA	CATGTTTATC	TTCATTAACA	TATTTCTCAG	TGATAAGAAG	GGCCCAGGGT	180
TCAACATCCC	ACTTTGCATC	CATGCAGACA	AGGGCTGTGG	GAAGCTGTAA	AACTGAAGAG	240
GCGGTGAATC	CAGGAGGGAT	TCCCAGATA	TCCGTGAGTT	GGTGTTTGAC	TTTCTTGAAC	300
ACGTCTTTCC	TTTACTTTAC	ACTTCCACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

CTCAGAGGGT	CATGTTGTTG	GGGAGAAAGA	GACCACATCA	CACACAGAGA	GAACAAGTCT	60
GTATTAGTTG	CTTTTGCTAC	ATAACAAACC	ACTCCAAAAT	TTAGTGTTT	AGAACAATCA	120
CCTATTTAGT	TAATGATTCT	CTGGGTGCA	ACTTGGTCTG	GGATCAGCTG	GGCAGTTCTT	180
TTGCTGGTCT	CAGCTGGGT	CAGCTGCCTA	TCAGCTAGGG	AGCTCTGTTT	CAGAGGTTGG	240
TTGGCTATGG	GTGGCAGGGA	TCAAGGATGA	CGGAGCCATG	TGTCTCTTTT	CCCTTTATTA	300
CCCAGCAGGT	TAGCCAGAT	CTTTTCCTTT	TCTTTCCTAG	GCCATGAAGG	CCGAATTC	358

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

GAATTCGGCC	TTCATGGCCT	ACTTGTTCAG	GGTATGGGGC	TAGGATGAGA	GAGAATNCCA	60
CAGAGTATGA	AGGAAGAGTG	ATAGATCCAG	ATGAGATACA	GCTCAGAGTG	CCACGCCCCC	120
AGAAAGAGGA	ATCAGGCAAG	TACTGTCCCA	AGGCAGCTGG	AGGGTGAGGG	CTGAGTGCCC	180
TGGCTTCCTC	ACTTGGGGAG	ACCATGGGTC	TCTGTAGAAA	TTCCAATATA	AAGGCAGGGA	240
AATTGACTG	CATGGAGTCT	TCAGGTAGAA	ATGTTTCTCT	TGCCTAAATT	CA	292

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

GAATTGAGCA	AGATACCTGG	GTGATGATCT	CTGAACAGGG	TGAGAACTT	TATAAAATGA	60
TGTGCAGACA	AGGAAATCTG	ATCAAAGACA	GAAAAAGAAA	ACTGACTACG	TTCCCTAAAT	120
GCTTCTTGG	AAGCGAATTT	GTGTCATGGC	TGTTGGAAAT	TGGAGAGATT	CACAGGCCTG	180

AGGAAGGCGT GCACTTGGGA CAAGCATTAT TAGAAAATGG AATCATTAC CATGTTACTG 240
ATAAACATCA ATTCAAACCA GAACAGATGT TATATAGATT TCGCTATGAT GATGGAACAT 300
TTTATCCAAG AAATGAGATG CAGGACGTTT TCGAG 335

(2) INFORMATION FOR SEQ ID NO:1367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GAATTCGGCC TTCATGGCCT ACTTTCTCTG TTTGCCTTGA CCTTTCTTTT TCATGTTAAA 60
GCCTTTCCTC AAATGTCTGA TTACCCCTGG CTGCCCGTCA TTAAAGAAAG CGCCACTAGT 120
CAGCTCATCG GAAGCTGTGA GGGAGAGGGC TGCATTTGGT CTGCCAGGT GGAGGAACAC 180
TCAGGCATCA GTACTAGGAG GTCTTTCCTC TCAGCCCAT TGGATTTCCCT AGAGTCTAC 240
ACGGCTGGGA TGAGGCACCT GGGTGCTGAG TAGAGGAAGG GAGTCATGGG TCAGTCACCC 300
TGTATGCAGA TTTTCACACA ACCCCCTCTC TCCAGGACAC GCCTCGCCCC CCACCCTAAG 360
TAATGCAGAA CCCAAATCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCCTAT GTGACTGCGA TGGATCTCTT TGTTCCTGTT TGTTCATTT TTGTTTTTGC 60
AGCCTTGATG GAATATGGAA CCTTGCAAT TTTTACCAGC AACCAAAAAG GAAAGACTGC 120
TACTAAAGAC AGAAAGCTAA AAAATAAAGC CTCGATGACT CTGGTCTCC ATCCTGGATC 180
CACTCTGATT CCAATGAATA ATATTTCTGT GCCGCAAGAA GATGATTATG GGTATCAGTG 240
TTTGAGGGC AAAGATTGTG CCAGCTTCTT CTGTTGCTTT GAAGACTGCA GAACAGGATC 300
TTGGAGGGAA GGAAGGATAC ACATACGCAT TGCCAAACTG ACTCGAG 347

(2) INFORMATION FOR SEQ ID NO:1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT ACCATTTTCT ATGAGCAGAG GAGAGTCACA GGGCATCATG 60
TGTTAGGAGA AAGAGGCTGG ACTTTATCTT GTCAGTAATG CTGGATGATA CAATAAGGGT 120
AGGGCCTCAA AAAGTAAATG TAAAAATGAT ATTTGGCACA CATTTGGGTG AATAGAGGCT 180
GGAGAAAGGG AACCAAGTCA CTATGTATTG GAATAATTCA AGTATAGGCC TGGGATACTC 240

GAG

243

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

```

GAATTCGGCC TTCATGGCCT AGAGGATTAC TTATTTCTCA GCATTCATCT GGTAAC TTAA      60
GCAGCATGAA GCAAGAGTTG CACTTTAAAA AATGACAAGA AAATAGCTAT TCATTTAGTC      120
GACAGAGTAA GGCCCATCTC ATTTCCAGGA TCACTAGTTT CTGCTTATGA CGGGGTGAGC      180
ATCCGCCAGC GCGGTGATTG GGAGGCGCCC CTGTGTCTTT AGGCTGAGGC AGTGCCCAT      240
GCTGCAGTGC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

```

GAATTCGGCC TTCATGGCCT AGTGTAGCAA GCTTCCCCTT TGGGAGGGAT GTGAGAACAG      60
AAGACTGAGG ATTGTCTCTA ACTCTAGGAT TCTTTGATGA TTGATTGGAT TGGGGTTTTG      120
TGTTGTGTCT AATATTACGG ATGCTAAAAT GCCTGTA CCAAGGTGAT AGCCACCAAT      180
AACCATACAC GTACTAGTCA TCCTAGAAGT GTTTTATTT CTTCTGTTGG TTATCTTCCC      240
TACCCCTAGG GTTGGTGTCT GTTTCCTGCT ACTTCAGGTT GGTTCACAC TGGGAGGCTT      300
CTGCTGACAG AAAGCCCCAT GCTTTGCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

```

CTCAGGGGCA ACTGCAGAAG AAAAGATCAG TGAATCTGAT GACATAGCAG AAGAAACTAT      60
CTAAAGCGAA GAAGACAGGA AAAAAAGCCC CAATGTGAAA TGAACAGATC ACCAGTGAGC      120
TGTGGAACAA CCTATATGGG TTATAGGAGA CCCTAAATGA GAGAACAAGG GACTAAAAGA      180
AGGATTTAAA GAAATAATAG TACAATTTTC TCCAAGTTTC ATGAAAACCG ATTGAATTCT      240
AGACCTGCCT CGAGGCAGGT CTAGAATTCA ATCGC                                     275

```

(2) INFORMATION FOR SEQ ID NO:1373:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```
GAATTCGGCC TTCATGGCCT ACAAGACCAT CCTGGCCAAC ATGGTGAAAC CCTGTCTCTA    60
CTAAAAAATA CAAAAAATT AGCCAGGCAT GGCAGCGTGT GCCTGTAGTC CCAGCTACTC    120
AGAAGGCTGA GGCAGGAGAC TTGCTTGAAC CCAGGAGGCA GAGGCTGCAG TGAGCCGAGA    180
TCGCGCCATT GCACTCCAGC CCGGGCGACT GAAGAGACTC CATCTCAAAA AAAAAAAAAA    240
AAAAAGATGA GCCTTTTCTG GGAAAGTGGA AAAGACAGAG AAGCCTCCTG ACAGCCAAGG    300
AGACCAGCAG CCAGTAGAGC AGGTGTTGTA ACAAGGCCGA GGCCCTCGAG                350
```

- (2) INFORMATION FOR SEQ ID NO:1374:
- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```
GGAAAAATCA AGGAGACATA TTACCACCAA AAGAACAATA ATTTCCTAGA AGCTGCAAAT    60
AAATAGAGAC TATACACTGC CTTACAGATA ATTTAAAGTA ATTGTTTTAA GGAATCTCAG    120
TGAAC TTCAA GAAATACAG AGAATCAGTT CTATGAAATC AGGGAAACAA TAAATCAACA    180
AAACGATAAA TTTAACAGGT TGAAATCACT AAAAGAACCA AACAAATTTT GGGGCTAAAG    240
AATACAATGA ATGAAATGAA AAATACTCTC GAG                                273
```

- (2) INFORMATION FOR SEQ ID NO:1375:
- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```
TGTGGACTAA AAAAGATGCT GGGAAAAAAG TTGTTCATG TAGACATGAC TGGCATCAGA    60
CTGGAGGTGA AGTTACCATT TCAGTATATG CTAAAACTC ACTTCCAGAA CTAGCCGAG    120
TAGAAGCAAA TAGCACATTG TTAAATGTGC ATATTGTATT TGAAGGAGAG AAGGAATTTG    180
ATCAAAATGT GAAATTATGG GGTGTGATTG ATGTAAAGCG AAGTTATGTA ACTATGACTG    240
CAACAAAGAT TGAAATCACT ATGAGAAAAG CTGAACCGAT GCAGTGGGCA AGCCTTGAAC    300
TGCCTGCAGC TAAAAGCAG GAAAACTCG AG                                332
```

- (2) INFORMATION FOR SEQ ID NO:1376:
- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

GAATTCGGCC	TTCATGGCCT	AGGCTTCAGC	AGCTTCCTAC	GATCAGCCGA	AGAAAGCAGA	60
AGCTCTGGAG	GCTGCCATCG	AGAACCTCAA	TGAAGCCAAG	AACTATTTTG	CAAAGGTTGA	120
CTGCAAAGAG	CGCATCAGGG	ACGTCGTTTA	CTTCCAGGCC	AGACTCTACC	ATACCCTGGG	180
GAAGACCCAG	GAGAGGAACC	GGTGTGCGAT	GCTCTTCCG	CAGCTGCATC	AGGAGCTGCC	240
CTCTCATGGG	GTACCCTTGA	TAAACCATCT	CTAGAGAGGA	CATCCCTGCT	GGGCTGCTGT	300
GCAGAGTATA	AGATTTTGA	CTTGTTTCATG	TCCCCTCTCA	CCCCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

GAATTCGGCC	TTCATGGCCT	AAATATGTTG	AAATAGGTTA	GAAAAGGAGG	TGAATATTAT	60
GGGCTGTTGT	CATTTGTAAA	TTCTGCAGTA	ACTTCAGCGT	TGAGGGTTTT	TTTTGTTTTT	120
GTTTTTGT	TGAGTTTTC	TACTGAAAT	CAAAGAGTTG	TACTCTGTC	TGTGGGTGTT	180
TAAGAGACAG	GATCTCACTC	TGCTGCCAG	GCTGGAGTGC	AGTGCAGCCA	CGAATGCCTG	240
GGCTCCAGGC	CCTCCTGAGT	AGCTAGGACT	TACAGGCATG	CACCACCACA	CCGATTTTTT	300
TATTTTTTTA	TTTTTATTTT	TTTAGTTTTT	TAGAGGTGGT	GGGGGGGTCT	CACTGTGTCT	360
GCTTCTGGGC	TCAAATGATC	CTCCTGCCTC	AACCTCCCAA	AGTTCTAGAA	TTACAGAGGT	420
GAGTCACCAC	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

GAATTAAAGC	ACTGCCTCTA	TTCAGGCTGC	CGAGGCACTG	CTTTAATTTT	TTGAAAGATT	60
CACCGCGTCT	TCTTGGATTT	CAAGAAAAAT	CCCGTTAAGA	ATTGAGGGGC	TCTCTCTTC	120
CCCTCCTGAC	GTGAGTGTA	CTCACTTCCT	GGTATGTCTC	CTTTCCTTTT	GGCCTACATC	180
CTTTGTCTGT	TAGGTGCTTC	CACATCCTTA	TGTCTTAAAT	GGCCAAAATA	CGTCACCCCC	240
ACTGCCAAAA	CAAACAGATC	ACTCGAG				267

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

```

GAATTCGGCC TTCATGGCCT AGAGGTGACT AGAAGCGAAG ATGGAGGTGG CGCAGCACCT    60
CATCCCAACT CATGCCACCT GGGGAAGCAG CTTCAGGCCT TTCTGTTGTA ACCTCAGCAG    120
AAACTTTGGG GTTTATCCTT TATCTTGCAC ATGCCCCAGG GAGGTAAAGG GACTTGCCTA    180
GGTTCATGTA CAAACTTTCT GCTTCCAGAG CAGGACTTTA TTGGGACACC ATAAGGTTGA    240
GGCTGGGAGG TACCCAAGAA TTCCTGGGGA TGGTATGTCA TTGACTGTGG GTAGAGGGGC    300
TCGAG                                         305

```

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

```

GAATTCGGCC TTCATGGCCT AGGCTTGGTT GCCTCTGAAA GGAGGGAAAG TCTCTTGTA    60
AATTATCTCT TTTGTGCTGT TTGCTGTTTC TCTGCTACCG TCTTTGCAGT TCTCCTCTCA    120
CTGGTGCAG GCTTTCATAG TAAGGTTTGG CGAGAAATGT TCCAAACATC ACATTTTGA    180
TTCTAGGCTG TCACCCAGG CTCGAG                                         206

```

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

```

GAATTCGGCC TTCATGGCCT ACTCCTCGAT GCTGATTCAT ATCCTACTGC CCATGGTTTT    60
CTGCGTCTTG CTCATCATGG TCATGTGCTA CTTGAAAAGT CAGTGGATCA AGGAGACCTG    120
TTATCCTGAC ATCCCTGACC CTTACAAGAG CAGCATCCTG TCATTAATAA AATTCAAGGA    180
GAACCCTCAC CTAATAATAA TGAATGTCAG TGAAGTATC CCAGATGCTA TTGAAGTTGT    240
AAGCAAGCCA GAAGGGACAA AGATACAGTT CCTAGGCACT AGGAAGTCAC TCACAGAAAC    300
CGAGTTGACT AAGCCTAACT ACCTTTATCT CCTTCCAACA GAAAAGAATC ACTCTGGCCC    360
TGGCCCTGC ATCTGTTTGG AGAACTTGAC CTATAACCAG GCAGCTTCTG ACTCTGGCTC    420
TTGTGGCCAT GTTCCAGTAT CCCCAAAGC CCCAAGTATG CTGGGACTAA TGACCTCACC    480
TGAAAATGTA CTCGAG                                         496

```

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAAACTAGAC AAGAAATCTC AAGCCATGGA GGAGCTAAAA GCAGAGCGAG AAAAACGAAA	60
GAACAGAACA GCTGAGCTCC TTGCCAAAAA ACAGCCATTA AAAACCAAGT AGGTCTACTC	120
TGATGATGAA GAGGAGGAAG AGGATGACAA ATCCAGTGAA AAGTCAGACC GCTCATCAGC	180
AACATCATCG TCTGATGAAG AAGAGGAGAA AGAAGAGATC CCTCCCAAAT CCCAACCACT	240
TTCCTTACCT GAAGAATTGA ATCGGGTTCG ATCTCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCTAGA CCTGCCTCAG TCTCCCGTC ATGCTCCCTC TGCCCCGCC TCAAAAAAA	60
AAAAAAAAA AAAAAAACA ACAGCACCTG TCCAGGCTTC CTTAGGTACA TCTTCTTTGT	120
ATCCATTGGG AGGCTCTGAG ACTGGCCCA CTTGGTCCTA AGAATCCCAA GGTCTTTGGG	180
AGCGTCCAGC ATGTTAATTA GCGTATCATT ACATACTGCT ATCCCTTTCC ATTTCTTTT	240
GTTCCATCAC TCTCCTCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC TTCATGGCCT ACAGATTATC TTACACTGAA CTGATCAAGT ACTTTGAAAA	60
TGACTTCGAA ATTTATCTTG GTGTCCTTCA TACTTGCTGC ACTGAGTCTT TCAACCACCT	120
TTTCTCTCCA ACCAGACCAG CAAAAGGTTT TACTAGTTTC TTTTGATGGA TTCCGTTGGG	180
ATTACTTATA TAAAGTTCCA ACGCCCCATT TTCATTATAT TATGAAATAT GGTGTTTACG	240
TGAAGCAAGT TACTAATGTT TTTATTACAA AAACCTACCC TAACCATTAT ACTTTGGTAA	300
CTGGCCTCTT TGCAGAGAAT CATGGGATTG TTGCAAATGA TATGTTTGAT CCTATTGCGA	360
ACAAATCTTT CTCCTTGGAT CACATGAATA TTTATGATTC CAAGTTTGG GAAGAAGCGA	420
CACCAATATG GATCACAAAC CAGATGGCAG GACTCGAG	458

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

GAATTCGGCC	TTCATGGCCT	AAGTTTTCAT	AATCTTTCTA	AGCAAATAAA	TTGAGCATGC	60
AGGTTTTTTT	TGCTTTCAGT	AAGTATGTTA	AAGATATTTA	TTGTACTTTG	STTTTCTTTT	120
CTTTTTTTTT	TTTTTTTTTT	TTTGAGACTG	AGTCTCTGTC	ACCCAGGGTG	GAGGGCAGTG	180
GCCCAACCTC	AGCTCACTGC	AACCTCCGCC	TCCCATGTTT	CAGTGATTCT	CCTGCCTCAG	240
TCTCCCGAGT	AGCTGGGATT	ACAGGTGTGA	GCCACCACGC	CCAG		284

(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

GAATTCGGCC	TTCATGGCCT	AGTAGTTGTT	CCATGCTGTT	GTTTTTGT	TTATCTTTCA	60
TTGCCCTTCC	CTCTGCAGTC	AACATTATGA	CCTGGGGACT	CCAGCATCCT	TCAAGCAAGC	120
CATTTCCGAA	GAAGGTGAAA	AGAAGCCAGG	ATGATTGGCA	CCTCCTCCTC	CTCCTCCTCT	180
TCTTCCTCTT	CCCTTGCCCA	GCCCCCTCCT	GTGCGTGTGT	TTCAGACAAC	ACAGGAGCCA	240
GCACAGGAGT	GGAAAATCCT	GTAGCGCAAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

GAATTCGGCT	TCATGGCCTA	ATTGAATTCT	AGACCTGCCT	CGAGCCTCCA	AAAAGAGTAA	60
ATAAATAAAA	ATAAAATTGC	CTTTAAACAG	AAACACACAT	AAAACAAAGT	TATATATTGA	120
ACCTAACCTT	GTATTTCTCT	TGGAACAGT	GGTTCAGTAT	TCAATAATTC	AGGATTGCA	180
GCAGCATAGA	ACTTAATGTA	ATGAGAGTCA	AGTATATATT	TCCCAGAACC	CTAAACTAC	240
TGCATATGTG	AACATATCTT	ATTCATTGAT	TATGTGGGCA	TATAGTGAAA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

GAATTCGGCC	TTCATGGCCT	ACAACTTGTT	CTAGCTTGTG	ATCCCTCAAA	GTTGGGTCAT	60
ACGTTAGTGC	TAGATACTAG	AAATTTTCAC	TTTTCCACTG	ATCAGAGAGA	CAGACATTAA	120

```

AAACAAAAAT AGAAGAAAGG AAAGCTTTCA CCCTGCAGCT TCTTAGCAGG GAACAATTGT      180
CTTGCCAAAA CTTTTTCCC TTTTCTCTCC CATTTTCTTT TACCCAATCC CTCTTACTC      240
CTTGCCAGTG TGACCATGCG CATTGGTTTA AAAAGATATT CTTTCCTAAT CAGGGCAAGA      300
CAGGCAAGAA TTTTAAAAAA GGAAGGGAGG GAGGGAAGAA GGGAAGGAAA ATAAATCCTT      360
TATTTTTTTA AACCTATTG AAACCTCTTA AGAAAAATCC ACAATAATCA GGATTTCTGT      420
AAATATTGTC AATATATATG AACATATTG AAAAACTACA GTTACAGTAT ATTTACATTT      480
TTGGAAACTT TTCCTCAGGG CCAAGTAACA TGTGTATCT TCCTTTTTCG TTGTGGGGGC      540
TACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGGCC TTCATGGCCT AATATGTTCT TCACAGGGAT GAGTCCTAAA TATTTATCTT      60
CAGCCATGAC ATTTTCTTG AATTCCAGAT TTGCATATCC AACTGCCAAC TTGATATCTC      120
ACTTGAAGA ACATCATCAC AAACCTAACT CATCTGAAGT TGGCTTCACA TTCTCCTCCC      180
CTATCACTAA CTGCCTTTCC CACAGTATTC CCCATTCGGG TACATGGTAC CACCATTAT      240
CCAGTTGTTT AGACCTAAAC CCTTCTAATT ATTCTTTTTC CTATCGTTAT CCCACATACC      300
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTAT TATTCTATTC CGTTGATCTA GCTAGTTTTA      60
AATTTCTAC CTTTCTACC TGTTTTGTT TAATAGTTTA CTGTTTTTAT CTGAACAAAA      120
TTCTCTTTC AATAGTTGAT CCTGCTGAAT GTCTTCCCGT AGCATTGGGC TTCTCAGGT      180
AACCTGGCAT TTTGCTTGA ATAGAAGGCT TTTTATTGTC CTTTTTTTCT TTTTTTATT      240
TGAGATATT ATCTTTTCT TATTATTTA TTCGAGTCGG AGTCTACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT AGGCGATCGT ATTAATTCTC AAGAAATTTC CAACAAATAC      60

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CACCTGGTTA ATGTTTTTCAT TAAGGGCACA CATTCTTGCT ATTGAGCCAA TGTTGTGGT      120
GATGGTGATC AAAGTCGCTC TGGCCAGGTC CTCTTTACTG ACAGCCTCTC GCTTCTCCTT      180
GCTCATCATG TTTCCAAAGC TTGAAGCCAC ACTCGAG                                217

```

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

CGGGAGGCTG AGGCAGGAGA ATCACTTGAA CCCGGGGGGT GGAGATTGCA GTGAGCCGAG      60
ATCAAGACAT TGCATTCCAG CCTGGGCAAG AAGAGGGAAG TTCTGTCTCT AAGAAAAAAA      120
AAAAAAAAAA AAAGCTACAC TTTGATCTTT GATTCACTAG ATATCAGTAA GTATTGCTG      180
CATTTTCATGA GAGCCAACCA TGAGTAAGAC AGAAGTACTT CCTGTCCTCC TGGGCTTCC      240
TGAGTAGCAG GAGAGATGGA CTAGGAAGAT GAGTGACTGC AGTAGCCTGT GCTGTCTGC      300
GGTGATGGGA GAGGCCACTG AGAGTCCGGA CAGGCAGGCT GATATTGTGA GAAGGCTTCT      360
GGAAAGAAGG AACATTTAAG CTGAGAGTGA GAGTTGCGTA AGAATTTCCC AGGGAGGGGA      420
AAGAGGGAAA CACTCGAG                                438

```

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT AAAACTTCCT AGGAGAAGGC AAGAGAAAAGC CACCAGACCA      60
GAGCCGAGGA CTAACTTTA AGGTCGAAGA CGGCAGAGGG GCAGGTTCTC CCCTGCACAC      120
CCCAAGGCCT CTCCTGCACC CGCGAGGCCT TCCTTGAGCG CCCAGGCCCC CGAAATGCCT      180
GCCCTCCTTC TGACAAAAGG AGGGGGTAGG ATGTGAAGGG GTAGTGCAAC CAACAATGTT      240
TTTGTAACA CAACAACAAG GAAATACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GTGAAATTGT CAAATAAAAA TATGAAACT CAGCTGACAA GAGTAAATGT CCTTAAAGAC      60
AAAACAATTG AAGAGCTCAG GCAATCTTTA GCAATGTTG AAAGGATGAA AGAGAAGGCA      120
AATGTTGAAA CGATGAAAGA GAAGGCAGTT GTGAAAACAG AAAACTTGAA AACTACATTA      180
GACTCTGCAG AGCAAAAGGC AAGATCAGAC AAAGAGAAGA CCCAGCAGAT GTTAGATGCT      240

```

GTCACCTTCTG AGCCCCCAAC AGCAAAGAGC GCACCTGAAG AAGTATCAGG ACAAGAACAA 300
GAAGTACTCG A 311

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC TTCATGGCCT ACTGTGTGCT TAGTTTTAAA GACAACTTTG AAGTAAACAA 60
TGAAATAAAA GATGTCACCT AAACCTCTGA GGCTCCTGAG CACATTTTGC TGATACAGTC 120
TGTGGGGCTT GAGGAGACCG CATGTATTGT TCTTCTTTT GTTTTCTTC TGAGTTCTCA 180
ACTGCGGAGA GCACCTGAAC CCCCTTTCTT TTTTGACCGC AGGCTGCACT TTGGGCCCCA 240
GCCAGCCCTT TTTCTTTTTC TTTTCTTTT GTGGTTCCTC CCTGGAGCGA CTCTGGGGAG 300
TCCTGGATAT CCCGCCTGCC CCTTCCCCTC AGCCCCATGC TTGTTCCAAC AGTCTCCACA 360
GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC TTCATGGCCT ACTTGGAAC GAAAGAGGGC CCAACCTACA ACTAAGAAGG 60
GACAAACCTT GAACTAAGTA AGACCTTACA CACCCAGAAA GAACACTGGG CCTCCTTCT 120
TCAGGGACAA TGCAGTAGCC ACTTGGCTTG TGAATTAC TGAAGGCTAT TTCCTGTAAC 180
TTGCTAGTTA ACTTAGTTT GTATTTCAGG CAGAGGTGCG CTCTGTAATG TTGGGCTTT 240
GACTTCACAG TACTGGAGAG CTGTTACAC AGATGTTTAG ACCTTCTCT CTCTCTCTCT 300
TTTCTTCTT CTCAACAACT CTTATCTCTC GAG 333

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCGAGAT ACAGCAGCTG CTGCAGAAGC 60
TCAAGTCTGA GTTGGAGATG GCCCAGGAAG ACCTGTCCAT GACCCAGAAG GATAAATTTA 120
TGCTCCAGGC AAAAGTGTCTG GAGCTGAAGA ACAACATGAA GACCCGTGCTC CAGCAGAACC 180
AGCAGCTCAA GCTGGACCTA CGCCGCGGCG CGGCCAAGAC GAGAAAGGAG CCGAAAGGCG 240
AGGCCAGCTC TTCCAACCTT GCCACGCCCA TCAAGATCCC GGACTGCCCA GTTCCCGCCT 300

CGCTGCTGGA GGAGCTGCTG AGACCACCGC CCGCCGTGAG CAAGAGCCCC CTCGAG 356

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC	TTCATGGCCT	AATTCATGA	GGTATTATTA	TCACTATTTT	ACAGATGAGT	60
AAACTAAGGC	TCACAGAGAT	TAACGGCAG	AACTGAAATT	CTCCATATCT	TTTGTATTCC	120
AGATTATTC	TCTTAATCAT	GATATGATTT	TGTCTCATAT	AATCCAATAC	AATAAATAAG	180
GAGGTCAGGC	AGTAGGAGGT	GAAGTTGGAG	AGACTGGGAG	ACCTATCAGG	AGGGGTCATT	240
TATGCCTGGC	TAGGAGTTTG	GACTTTATGC	TGAGGCTATG	GGAGCACTAT	TAAAGTGATT	300
CTAGCACTGC	AAAGTTATGA	TTAGGTTTAT	CAGCCAAAGG	AAAAAAAAG	ATCTTGGTGG	360
TCACAGTGCA	GGTAGATACG	ACATAATCGA	GAAATGTGAA	GAATGCAGAA	TCAAGAGTTT	420
GGTGCTGGAC	AGAGAGAGGA	ACTCGAG				447

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACTCTTT	TAAATTTTCT	GCATTTGCCT	60
GAAAAGCACC	CCTGTAAGAA	TAGATTCTC	ATGGCTCTAA	AAATTATTCC	CAAGAATACC	120
TTACTTGTTT	CAAAAGCAGA	CTGTTTCTCT	TCATTTTCATC	TCAAATCAGA	CTTCTGGGCA	180
AGATGTTCTT	TAGAGTAAGC	AAACCTACAA	CCTAAAAATC	TCTTCAAGAG	GCATCTCTGG	240
TCTTGTCACA	AGACCTCTTC	AAAAACCCAC	AGTAAACTC	CCCTCCCTCC	AGTTGGCCAC	300
CAGTCTGCCA	CCAAACATGA	ACAAATTCTG	CTGCTAATCG	GTTTCCCTTG	TGATCTGGTT	360
CCTGAGGTCT	TCGGATCTGT	GCAATGAATT	ATTATTGTT	TTATTAAACC	GACAGTGGTG	420
TGCTCGAG						428

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC	TTCATGGCCT	ACTAGACCTG	CCTCAGGGTG	TTCTGTGGTT	TCAGGTGGAA	60
GGTGGAGGGC	CTCGGAGACC	AACTGTGAGT	TAGGCGGGGT	TTAGAATCTG	ATGGGAAGAG	120
GGCAGAGACA	ACAGGTTCTGA	AAGAGTCAGG	GCTCCTGGGA	CCTGGGAAGT	AAAGAGTAAA	180

CCTGGGGCAG TGGGTCAGGC CAGTAGTTAC ACTCTTAGGT CACTGTAGTC TGTGTAACCT 240
TCACTGCATC CTTGCCCCAT TCAGCCCGGC CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AGCCACCGTG CCTGACCTAC TTATTCTTTT TCCTGTTTCA 60
CATCTAGTGT ATGATACGAT TTGCTTATTT GTTTATGTTT CATCATCTGT TCCCCACCCT 120
CAGCCCTGGC CCCCTTGCTG GAACGCAAGC TCCAGGCAAA GCTATTTTTC CGTTGCTGTT 180
TTCCAAGGGC CTCGAACAGT GCCCGGCACA TAGCAAATCC TCAGTGAACA TTAGAGGAAT 240
AAGTGATTCA AGAATAGAGC TGTTAGAAGG TGTCTGGAG GAAGACGCAT CCGGCTTCAT 300
CCCTGGCACC ATCGAG 316

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAATTCCTCA GCAAAATGAG GATGAAAACC AGGAAAGAAG 60
AAGAAATGGG ATCCATAAAA CAGTGGACCT TACTTAGGAT GTCTCATTCT AGAGTGACAG 120
CCAAAAGGGT ATCTCACCTC AGAGTGACAG CTATCCAGCA GACTAATTTC AGATGAGAGC 180
ATACTGTCTC GGGCTTTCTG GGAAGAATGT GCATTCAGTG CCATAGATAG TATCACTGAA 240
GAGCTGGGAT GCTTGAGAAG ATTATTTAGT CAAGAAAAAA GAAAGACAAA TCAACAATAT 300
GTCAAAAAAT TCAGGTCCAA TTATAGAGCA AAAGGGCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AAGGCTAAAA AGAAGGAAAA AGAAAAGGAA AAAAAGGAGG 60
AGGAGAAAAT GGAAGTGGAAT GAGGCAGAGA AAAAGGAGGA AAAAGAGAAG AAAAAAGAAC 120
CTGAGCCAAA CTTCCAGTTA TTGGATAACC CAGCCCGAGT TATGCCTGCC CAGCTTAAGG 180
TCCTAACCAT GCCGGAGACC TGTAGATACC AGCCTTTCAA ACCACTCTCT ATTGGAGGCA 240
TCATCATTCT GAAGGATACC AGTGAAGACA TTGAGGAGCT GGTGGAACCT GTGGCAGCAC 300
ATGGCCCAAA AATCGAGGGG GAGGTAACCT GAG 333

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

```

GGGCCCTGGG CCCAGCCCC CAGCCCATCC GTGGCCCAGG CACTGGGGGG CTGAGGTCCT      60
CTGAGAAGGG ACACAGGGCC GGGGGGCTCT CTCAGCCCAT CAGCAGGAGA GGACTGACTC      120
CAGAAAAATC AGCGTTTGTG CCACTCAGG CTGCCAAGAC CTGTGTCCGT CCTTCCAAGC      180
TCAACCTTCA GAGTTCATGA GGGCCCTTGC CCAGAATGTC CACAGAGTTC ATGAGGCCCC      240
TTGCCCAGAA TGTCCACATT TGAAACCTCC CAACACCGAG CCCCATTTCA ACTATAACCA      300
GGAGGGAAAA TGGTGCTTGA AATAAGCATG CCACAAAGGA AAACCTGCTT TCTCGAAATG      360
GGCCCTGGCC GCCCAGGCC TGACCTCCCC GGCCAGGATG GAACGTTCCA GAAACCTCTG      420
AG                                                                                   422

```

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

```

GAATTCGGCC TTCATGGCCT ACTGGGGTCC AAACCTGGATA TCTTGGTGA GAACATGGGG      60
AGGCTCAGCT TTGGGTCTAA CAGCAGTGAC TTCAAGGGCC TGTGAAGCC ACCAATTCGT      120
GGGCAAACAA TCCTTACCCA GTGGATGATG TTCCCTCTGA AAATTGATAA CCTGTGAAG      180
TGGTGGTTTC CCCTCCAGTT GCCAAATGG CCATATCCTC AAGCTCCTTC TGCCCCACA      240
TTCTACTCCA AAACATTTCC AATTTAGGC TCAGTTGGGG ACACATTCT ATATCTACCT      300
GATGGACACT CGAG                                                                                   314

```

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGACTGCC CAAACCTGAC      60
CCATCCTCAG ACCCCACCC CCGTCACCGC TCCTCCCAAT GATTCCTCCC TCTGTCAGTC      120
CTGCTTACT TTCCAAATCC TCGCTGCTC CAAACCTGAC CCATCCTCAG ACCCCACCC      180
CCGTACACCG TCCTCCCAAT GATTCTTCT TCTTTGATCC TGCCAACTTT TCCCAACAG      240
CACCGTAATC CTCCCCAA TCATCACAAT CCTCCACCAT ACAATCCCG GTTCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 199 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

```
GAATTCTAGA CCTGCCTCTC GCTGGAATC AGCGTTGTAA GATGGACGCC CTGCTCAGCA    60
GAGCTCATCT TTCTAGAAAG GCACCTGGCC TTGGAAGGCG AGTGAGGAAC TGCATAAGG    120
ACTTTTCTT CCCATGTTGC TTTTCAGGAA AGCTTTCAGG ATGTGGAAT GATGGTTCAG    180
CTATTGGATG AGGCTCGAG                                         199
```

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 220 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

```
GAATTCGGCC TTCATGGCCT AGTGATCCAG AAGAATTACC ATTAACTTTA TTTCAGAATT    60
TAGACTTCCA AATCAGGTTA ATCCTCCAAT TAAAAGAAAG ATTCAGAGTG AATTTTAA    120
AAGGCAAGGC AGTTATATGT TGCTTACAAG AACTAAACA TAAAGGCACA GATAAGTTGG    180
AAGTAAGAGG GAAAAGACA TGCGAATACT AAGTATAGAG                                         220
```

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

```
GAATTCGGCC TTCATGGCCT AGATAAGCCC TTCAGAAACA CATGCACTGT TAATTCTGTT    60
TTAAATATAA TAAAAACCAT TTCACCTTGA CATTACCTAT TAAGTTTAC TGAAAGTCAA    120
AAGGCCTACT TACTGTGACT TCCAAAAAAG TATTTTGATA ATATTTGAA AGAAATAAAT    180
AATTTCCCTT TGCATGAAAT TAAAAGCCAT GATAATAGGG AAAACATTAC TCGAG      235
```

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 577 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC	TTCATGGCCT	ACCCACGTAA	CGGCTTGGCT	GGGCACCCCC	GCTTGGCTTG	60
GTGGTCCTGG	TTTGATTGG	CTTTACCCTG	GCAATTCCTT	GCTGGGCTTG	ACCTTTTCTT	120
GCTGGGCTTG	GCAATCCCTT	GGCTGGGCTG	GGTGTTCCTC	CGGTGGGGCG	TGCACTTTCC	180
CTGGGTGGTG	GAGGGGGCGT	GGGCTCTCCC	C3GGTGGTGG	GGGGACGTGG	GATCTCCCCA	240
GTTGGTGGTG	GGGGAGGGGT	CGTGGGCTCT	CCCAGGGTGG	GGTTTTGGCT	GGGATTGACC	300
TTTCTCCCTT	AACAGATTGG	AAACTCGTAA	TTTCCCGCTT	TTTGGTGAAA	CTCGTTGACA	360
GACACCATCT	GCTCGCTACT	ACCAGGCTGT	TGAAAGCAGA	TGGTGGCTGA	GGTTTCTCCA	420
AAGCTGGCTG	CCTCCCTAT	GAAGAAGCCC	TTTGGCTTCA	GGGGCAAGAT	GGGCAAGTGG	480
TGCTGCTGCT	GCTTCCCTG	CTGCAGGGGA	AGCGGCAAGA	ACAACATGGG	TGCTTGGAGA	540
GACCACGACG	ACAGCGCCTT	CACGGAGCCC	ACTCGAG			577

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC	TTCATGGCCT	AGGGATGCCT	CTCAGTGACC	CTTATATGTC	AGGTATGAGG	60
CGGATGGGGC	ATCTCTCTAG	TCCTTTTCTAG	GGTTTTTACT	CTTCTAGTCC	CTTCAAGGGC	120
TGAGTGCTCT	GACTTTATGT	CTTCCACAGT	AGGCGTTGAC	CCTGCACTAT	CAGATCCTGT	180
GTTGGCCCGG	CGCCTTCGGG	AAAACCGGAG	TTTGGCCATG	AGTCGGCTGG	ATGAGGTCAT	240
TCCTCAATAT	GCAATGTTGC	AAGACAACCC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC	TTCATGGCCT	AGTTTTATTT	TGCACTTGGA	AATATGTCAG	AAATCACTTG	60
AAGGCAAATA	AGATCTGGCC	CTCTGCAGAG	TTAAGTGGCT	AACATGCCCT	AGATCTCCAG	120
GCTTAGAGGC	TGCCCTTTTG	GTACCCATGA	TTTCCAGGC	CTTCCAGGG	CAACATTGTC	180
CAGCATCTCT	CTCTCTCCTC	CCGCCGTCTT	CCTTTGGAAG	TTGACTCTC	ATGTGTGGTG	240
CCCGATCCCT	AGGCCACCTG	TGCCGGCCAG	CCCCTGAACA	GATAAATCCT	ACTAAAGGTT	300
AATCCCAAGC	ACAAGCTTTG	GGCTGGTCCT	TCTGGGTTGA	TTGGCTTTCT	CTCTCTCTCT	360
CCTTTTTTGA	GATGGAGTCT	CCTTCTGTCT	CCCAGGCTGG	AGTGCAGTGG	CACAATCTCG	420
ACAATCTTGG	CTCACTGCAA	CCTCTGCCTC	CCGGGTTCAA	GCAATTCTCC	TGCTCAGCC	480
TCCTGAGTAG	CTGGGATTAC	AGGTGCCCGC	CAGTCTTCT	GGCATACTCG	AG	532

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

GAATTCGGCC	TTCATGGCCT	AGGCATCCAG	GACAAAAGTT	TGGAAAACAA	AATAATGGAA	60
CTAAATAGTA	CTAACCAAAG	TATAGGGTGC	TTTATGATTT	ACAGAACTCT	CTTACAGGCA	120
GTATGTTGTT	CAGGCGCCAC	TAGAACCCAC	GTAATGGCAG	AGGCTTCCTG	TTCCATGTTT	180
AAAAACCTTT	CCAAGGCTTT	TCATTATTTT	CTTATCTGTG	GTACCCCTAG	CTTCCTGTGC	240
TCTAGACACA	CTGGCCTACC	TTCAACTTCC	TTGACCAGTG	TAGCTTACAG	TGTAAGCTTA	300
CCCCCGCCC	CCACCCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

GAATTCGGCC	TTCATGGCCT	ACATGAACGG	AAGAGTGGAT	TATTTGGTCA	CTGAGGAAGA	60
GATCAATCTT	ACCAGAGGGC	CCTCAGGGCT	GGGCTTCAAC	ATCGTCGGTG	GGACAGATCA	120
GCAGTATGTC	TCCAACGACA	GTGGCATCTA	CGTCAGCCGC	ATCAAAGAAA	ATGGGGCTGC	180
GGCCCTGGAT	GGGCGGCTCC	AGGAGGGTGA	TAAGATCCTT	TCGGTAAATG	GCCAAGACCT	240
AAAGAACCTG	CTGCACCAGG	ATGCTGTAGA	CCTCTTTCGT	AATGCAGGCT	ATGCTGTGTC	300
TCTGAGAGTG	CAGCACAGGT	TACAGGTGCA	GAATGGACCT	ATAGGACATC	GAGGTGAAGG	360
GGACCCAAGT	GGTATTCCCA	TATTTATGGT	GCTGGTGCCA	GTGTTTGCCC	TCACCATGGT	420
AGCAGCCTGG	GCTTTCATGA	GACACCGGCA	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

GAATTCGGCC	TTCATGGCCT	AAAAATATCT	AGTCACTGTT	CTGTTTTACC	CATTCTTTTA	60
AACTTTGTTT	TTCAGTTTCA	GTCAGGCTTC	CAAGAAACT	GATAACATTT	TGATTGGTTG	120
GTTTCTCTTA	TATCTTTTTC	ATTTACAGT	ACATTGTGAT	TTAATGATT	ATCTCTTAAA	180
TCTTTTTCAG	TTCATAGGTT	CCTCCTGTCT	CTTTCTTTT	CCTTGCACTT	CATTTGTTGC	240
AGAACCTTTG	TCCTGTGGTT	TCGCACAGT	TGGAGGAATT	GGGAAAAGTG	GCTGTCTAAA	300
CTGGTTCCCT	CCTTCCCAT	ACTGCTGCAA	TCAAGATGTT	AGGGGGCCTA	CAAGCAATAG	360
AAGCATCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTGGCCT TCATGGCCTA GTCATTGCT TTTATATCAG ATATCTAATT AATCAAACCT	60
TCTGGTTAAG TGCCTCCAAT TATTAACAAT CCTGCTCAGA GTTAAGATTA GCATCCAAGG	120
ATTTTCCTCC ATATTCTTT TCAGAGGCAA TGGAAATTAC TAGTTTTTTA GCTCTTCAAC	180
TTTGGCTGAT GGTTTTAGTG GTGGTTATGC TATCTTCAGT AGTTTGGGGA TCGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGGCC TTCATGGCCT AAGAAAGGTT AAGTTACTTG CCTGAGGTAA CTTAGCATTG	60
ATAGAATTAG GATTTGAACC TGGGTAGTAT GACTCTTAGG TCCCCATGAG CTGGCACACA	120
GGTTGCCAAT CCATCAGTTA ACCTTCCCAT CACTGGGTCA GAGAGCCAAG GAGCAGAAGG	180
GGGATAGAAC TTCCCCAGTA CCAACTAAG GGGCTGAGCT GGGATCGCAA CCACAGGTTT	240
TGTTCCAAAG CTGGGGCTCT TTCGACAAGG CCATGCCCGC CTTGTCTCTT ATGCATGCTC	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 174 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATTCGGCC TTCATGGCCT AAACAAACAA AAAAAATGT TTTATATGCA AAAGTTTTTT	60
GTATCATGCT TGTATAAATC CAGCTTTTTT TGTATCATGC TTGTATTTTT TTTTCTAGC	120
TGTTATTGCT TTTCTGATAA TAGTACTGAA TTTGGTGTTA TGGCTGGTCT CGAG	174

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 234 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC TTCATGGCCT AATTTTATAT TATTGTAA CACTGGGCTG GAATTATTGT      60
TTTGGGAAAA GGCCCATGAG AGTTTTTGCT CTGTGGGTTT TTAAAGGTAA GAATAAATTT    120
CGTGTGTTGAG ATGTTTTTGA TGTGCCTGTA ACCAGAATAG AAGTGTCTTA GATTATAACT    180
TTCTCTCAGA TTGAGTAATT CTGTTGTAAT AAGTCAGCAT ATGTTGCCAT CGAG          234

```

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAAAAATATTT TTACTTTTAT AATTGATAGT ATTTCTTAAC TCTCAATTAA AAAAAGTTTT      60
TAAGCATTTT TGTGATATAG ATACTATCAT TTCATATTAC ACAATGCTTC TGATGATTTT    120
GCTGTTGTTG TTAGGGACTA CTCGAGGCAG GTCTAGA                          157

```

(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

```

GAATTCGGCC TTCATGGCCT ACCAGGATGA GAGGGGAAAA AGAAAGCCTC CAGTGACTTC      60
AGTTGCTTTG CCAGTTGTCT TGGGATTGTT TTACACCATC CTTTACTTCC CTTGCTCAGA    120
CCTCTCTGTT TCACCATGTC TCAGGCATTC AGGAAAGTAT CTGCTCACTC CCACTTGGTG    180
AGTCCTCGGC CTTGAGGTTG CTGACTCTCA GGCCTTAGGC AGCTGGATGA CTTCCCGCTT    240
CATGCAGCAA AGGCCAGGGG CTGCGCGGCC TCTGCAGAGT TGTTGCTAGG GAGACTTGTG    300
TCATCATCCA CAACCTTGTT TCTCACTTCC TGGTTGGGCT CATCTCTGAA GAACAGGTCT    360
CCCAGCTTCG CTCCTTATCA CTGCATTGTG AAGAGGAGGA AAAGTGAATC ACGGAGAGAG    420
AAAGGAAAGG ATAGAATCAC AGGCTGCATC TGCACCTGAA AAGTGACCCG CGGAAACTCT    480
ATGGCGGATC TCGAG                          495

```

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

```

GAATTCGGCC TTCATGGCCT AGACAAAAGT AGAATTAGTA AACTACTACA TTGAGTACAC      60
TTTGTGTAA AATTCATAGG GAAGACTTCT TAAAAACAAG TGAAATGTG AAACCCCCC    120
CTAAGCATT CAGATGGCTT ATAGCTGTCC ACGGGGTTGG TAGAGGTGGG AAAGGGAAGG    180
GTTCTAGGCC AGAATGTTC TATTTAGAAG AACTCAAAT TACAGTCTGT GTTATGTATG    240

```

TATACCATTT ATTCAATGCT ACTGTGTATA TAATGGAAAA CTTAAGTCCA GTTGAAACA	300
TCTAGTCTTT CTAGGTGTTT AAAAGTGTAC AACAGCCTGT CGCAGTGGCG CATGCCTGTG	360
GTCCCAGCAC TTTGGGAGGC CGAGGCAGGC GGATCACGAG GTCGGGAGAT CGGGACCATC	420
TTGGCCAGCA TGGTGAACC CCTCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GGGAGTTTAT TATTCATTAA CGAAATTAGC CCTTTTATCT GCCATATAAT TTGCAACAAT	60
TTTATATCAG CTTTTTATT GTCTTTTGGC TGTGTTATG AAAGTTATGG CCATGCAGAA	120
ATGTGGGATT TTATGTAGCA CAGTTGTCTC TTTTTTTTT TTTTGAGACG GAGCCTAGCT	180
CTGTCACCCA GGCTGGAGNG CAGTGGCATG ATCTCGGCTC ACNGCAACCT GTGCCTCCCA	240
GGTTCAGCA ATTCTTCAGT CTCAGCCTCC CAAGTAGCTG GGACTACAGG CGCCACCCCC	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:1424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG	60
TGCTACAATA TGTGCTGTTT CTTTGTGTTG AATTGCAGAT TGTCTACTAT GAAGCAGGGA	120
TTATTCTATG CTGTGTCCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT	180
TCTTTGTAT GTGTCGTGC TGTAACAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG	240
AAAATGGGCC CTTCTGAGG AAATGCTTG CAATCTCCT GTTGGTGATT TGTATAATAA	300
TAAGCATTGG CATCTTCTAT GGTTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:1425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTGA AATTATAAAT	60
TTTCATTCTG AATGAGGTTT CTTTTTTTGA TTTCTTTAA AAAAAAAAAA CAACCTGCTT	120
TGATTTGCTT TACATTCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA	180

TGAACACCCT CGAG

194

(2) INFORMATION FOR SEQ ID NO:1426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGGCC TTATGGCCT AGCCATGTAT TTTCTAATAT CCCTTGGA	60
CTCATGTTT ATTTGAAGT ATTGGGATTG TTTTCAGTT ATCTTCTGT	120
ATTTAATTCT GTTATGGTCA TACAACATAA TTAAATTCT TCTAAATTG	180
TTTTGTGTC CCAGAAATG ATGAATCTCT CATTGAATGT TGTATGTGCA	240
ATGTTTATTC TGCTGTTGGT GGGTAAAGTG TCATGAATAT AATTAGGAGA	300
AGTGTTAAGG TTTTCTATAT CCTTGCTTTT TTGGTGTACT TATTTTATTG	360
GAGAAGGTT GAATTATCTA GGTGCAACTC GAG	393

(2) INFORMATION FOR SEQ ID NO:1427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GCGATTGAAT TCTAGACCTG CCTCGAGCCA CCCCCTTAAT GTGTGTGTG	60
CCTTGGGTGG GGCCATGTGT GTGTTTGTGA TGTCCTTAA GTTGATGCAG	119

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAAAAAGCAG TAAAAATAGA AATCCATCTT CACCAAGCCT TTAAAGCAAT	60
ACTGAGGTC CTGCATACTA TAACACACAG AAGGAATTCC TAAAAATGTT	120
CTGTCTACCC AAAGTTCTAT CATCCTGGCA AACTGCTCTC TCCAAATTC	180
ACTCTCTCTG AAATCCAAC CCTTCTCTCT TATACCTGT TCTCCAACAT	240
TTAGTTTGTG TTCTTCTTAA TATAGCTATT TCTGTTTACC ATTTTGAGCT	300
AACCACTACT TACCACCAA ACTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

```
GAATTCGGCC TTCATGGCCT AATCACATAT ACACAATTTA CCCATTTCAA GTGTACACGT      60
AGTGGTTTGA GTATATTTAC AGATAGGTGC AACTATCACC ACAGTCAAAT TTAGAACCTT      120
TTCATCAACC CCAAAAGAAA CACCATACCC TTTAGGTATC GCCTCCCCTA TACTCCACCT      180
TCCAACGTCT GAGCCCTAAG TTACCACTAA CCTTCCTATC TCTATAGATT TCCTTATTCT      240
GAACTTTTGA ATGGAATTAC AGTATCTGGT CTTTGTGTCG TGTTTTTTTT TGACTAATGT      300
TTCAAGGTTC ATCCAGGCCC TCGAG                                           325
```

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

```
GAATTCGGCC TTCATGGCCT ACCTAAACCT GGCAGAGTAC ATCATGCCTC CGAGAAGAAA      60
CGTCATTCCA CTCCTTTGCC GAGCACTGCT GTACCAAGCC ATACACCTGG CAGCAGCCAG      120
CAGTCCCCGC TCAACAGTCC TCACCCGGGG CCCATCCGGA CAGGCCTGCC TCCTGGGCAC      180
CAGCAGGAAT TTGCCGACG AGCCAACAGC ACCTCCAACC CTCGAG                                           226
```

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

```
GAATTCGGTT CATGGCCTAG GATTAACAAC TTGGAAGAGG CCTATGATAC TCCTGGTAAA      60
CCTCTTTGTG CTGCTCTCTG TGGTTTGTGT CCTCTTAAAT CTAGCTGGAT TTATCCTAGG      120
CTGCCAAGGG GCCCAGTTTG TGTCCAGCGT GCCCAGGTGT GATCTGGTGG ACTTAGGTGA      180
AGGCAAGATT TGCTTCTGTT GTGAAGAATT TCAACCAGCC AAGTGACAG ACAAAGAAAA      240
TGCCTTGAAA CTCGAG                                           256
```

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

```
GAATTCGGCC TTCATGGCCT AGGTTGCGGT GAGTCGAGGT CTGCACTCCA GTCTAGGTGA      60
CAGAGCCAGA CCTGGTCTTT AAAAAAAAAA AAAAAAAAAA AGTGAATTCA AAAGATTAGC      120
TAAGACAAAT TGGGAAAAAA AACCAAAAGG GGAGTTGACC TAACAGATAT TAAGATGTAT      180
TTCTAAAGCC ATAGCAGCTA AAATAGTACA GTATTAATGT AGGGACAAAC AGAACTCGAG      240
```

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

```
TCATTCTGAA CAAAAGGGAT TAGAGAAGAA AAATCTCTTG ATATAAGGCT TGAAAGCAAG      60
GGCAGGCAAT CTTGGTTGTG AATATTTTCT GATTTTCCCA GAAATCAAGC AGAAGATTGA      120
GCTGCTGATG TCAGTTAACT CTGAGAAAGTC CTCCTCTTCA GAAAGGCCGG AGCCTCAACA      180
GAAAGCTCCT TTAGTTCCTC CTCCTCCACC GCCACCACCA CTCCTCGAG      229
```

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

```
GAAATTGAAA CTCAAATCAG TTAGCTTCAA ACAAAAACGA AAGTTAGACC AAGGGAACGT      60
ATTAGATATG GAAGTAAAGA AAAAGAAACA TGATAAACAA GAACAGAAAG GAAGTGTGGG      120
AGCTACATTC AAATTAGGTG ACTCTTTGTC AAACCCAAAC GAAAGAGCCA TTGTTAAAGA      180
AAAGATGGTA TCAAATACTA AGTCTGTAGA CACGAAAGCG AGTTCATCTA AATTTAGTAG      240
AATTCTAACT CCTAAGGAGC ATCTCGAG      268
```

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```
GAATTCGGCC TTCATGGCCT ACAAGACTGT CTCAAAAAGA AAAGAAACAC AAATATTGTA      60
ACTCCAAATA TTCTTTGTGT GTAGAAAAAT CTAATGGATA ATTAATACTA GAGCAGAGAG      120
```

AAAAGCCTAG GAGTTGAGAG ATTTTATAGAT ACGTGACTGA AAAGATTGGA AAAGGCTATC 180
 AGTTTTAATG CTTGTGCTG TCTTTGTGTG GGCCATGGTA TTTTGAAGA GCACCATGGA 240
 GCTCGAG 247

(2) INFORMATION FOR SEQ ID NO:1436:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GAATTCGGCC TTCATGGCCT ACCTATTTGT GCATCAAGTG GTTATCTAAA TAGTTTGAAA 60
 GGATTGATAT ACTACATTAT ACGTCAAAAA TAAATAAATA AAATTAAGAA GACAGGGATT 120
 CCAAGATTGT AGCTGACCAA GCTGTCTTGT TTTGCGTACA TCAACACTAT GCTGCTTCCA 180
 ATATTCCTAG CCATTCCACA GGTAAATGATT TTTCAACAAT CAAGAGAAAG TCATTCTTGT 240
 ACTGTAACAT CTCTCGAG 258

(2) INFORMATION FOR SEQ ID NO:1437:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 415 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AAATCACTTG GATTGGTTCT CTAATTAAAA CACAAGCTAG 60
 CTACCCAGTC TTGTATTTTG TATTTTAAAG AATTGTAAA AAATAAATTT TGTTTGTAT 120
 TTGTGTAAAG CATAGTCATA ATTCTAAATC AAACACACTG CATCGAGTTT ATCACTGAAA 180
 TTCAGCATCT GCTTTGTGCC TCACCTTGTG ATCTTCTGCT CTCATCGATT ACAGGCGTGA 240
 GCCACCGCGC CCGGCGGTAT GTTCCTTACC CTTAAGGACA AGAAATACCG TTTGAAAACA 300
 TTCTTCTTGA ACATTAACAA ACTTAGAATG GTACATTCAT TTAAGAATTA AAATAGGCAC 360
 AAGAGGATTG AATTTTGAA ATATGTTGCT TAGAAATTG GGGCAATTC TCGAG 415

(2) INFORMATION FOR SEQ ID NO:1438:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GCGATTGAAT TCTAGACCTG CCTCGAAGTG CCAGCAGCAG AGGAGATGAC AGTGACATAT 60
 ACAACAGAGG CTGGGGTGGG CACTCCAGGA GCCCTGGAGC GGAAGACCTC AGGGCTAGGA 120
 CAGGAGCAAG AGGAAGGGTC AGAGGGCCAG GAGGCAGCCA CTGGGAGTGG CGATGGGAGG 180
 CAGGAGACAG GAGCAGCTGA AAAATTCCGA TTAGGATTAT CACGGGAGGG AGAGAGGGAA 240
 TTGAGTCCGG AGAGTCTACA GCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCA TATCCCTGAG CAGTAGAGTA AATTAAATCC      60
TTTCTGAGAG TCTTAGATGT TTTTCTATGT CTCTTCTTTC TTATTCTCTC TCTGTTTCTT      120
TCTCTCACTC ACACACACAC ACACACACAC ACACACACCC CTAAAATTTG TTCTGAATGG      180
CCCACTAGGG CTGAATCATT TAGTGACTTC ATTGATTACT ATCCTGAGTT CTTCTTCCTG      240
CTTCCAGACT AGTGAAAATA TTCCAGAAAG CTTTAATATT GGAGAAAAGG CAACGCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```

GAATTCGGCT TCATGGCCTA GCATTGGGAA GTAATTTTTT AAAACAACAT TCATATTAAT      60
TTAAGGAGCA TAACAGATTC CAGTGAATGT TATGATTCGC TATTGTAACA TTATTCTAGT      120
AAATATGTTG GAGAAGAACA GTTCTAGTGA ATTAAGTATG GTTTTGAAG GCAGCTATGC      180
TCACCATCAT ACCACCAACA CAACCATGGT TTTATTTTAT ATTATTTATT TTATTTTGA      240
GACAGAGTCT C                                                                                   251

```

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```

GGAATTGGAA AGCGTTTCCT TGCCAACACC AGAAATCCAG TCAGATTCTT TACATAGCAA      60
AGTCGAAGCT CCTCCTTCAG AGGTGGCGGA TACGTTAGTA ATAATGACTG CTTCCAAGGG      120
TGTTGCACTC CCAGAACCCA AAGATAAGAT TTTGGAGACA CCTCAGAAAA TGACAGAAAA      180
ATCTGAATCA AAGACACCAG GAGAAGGGAA AAAGGAAGAT AAAAGCAGAA TGGCAGAACC      240
AATGAAAGGC TACATGAGAC CCACCAAGCT CGAG                                                                                   274

```

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC TTCATGGCCT ACCTTTCTCC ATGTTTAACT GGGCTGCTCC CCATTCTCTG	60
CCTCCCTGTC TCCTCAGCCG CCAGAGCCCA GCCCCTCCGA CCAGGCCTCA CCCACCCCA	120
CCCGACCCTT CCCTGAGGGT CCTTTCCTCA GTACCACTGA CACTTGGAGG CAGGAAACCC	180
AAACCTCCTT AACTAAGGCC TCATTCACCT CGAAAGCAGT GGTGCTTCCC TCTGTTCATC	240
CAGGGCCATA AAGCCACTGT CCCCTTAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC TTCATGGCCT AATTCGCGCA TTGCACTCTA GCCTGGGCGA CGGAGCAAAA	60
CTCCATCTCA AAAAAAAAAA AAAAAAAAAANN NANTCNGAAA CAGAAAAAAA AAAAAGAATA	120
CACTGCATTG CCATTATCTA GTCACCCTGT GTAATATAGC AGCAGAACTC ATGCTTCCTG	180
TCTTAACTGT AACTTTGTAT CTGCTGACCA ACCTCTCTCC ATCCCCTCCT CCCACCTACC	240
CTCCCCAGTC CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GAATTCGGCC TTCATGGCCT AGGAAGCATT AAATTGGGCC ATAGGAAGGA CAAGTCACAT	60
CCAGTTTAGT GATCAATGGT GGTGTTGGGAA AGAAATAACA GAATTCTACT CCTACATGAT	120
AGGGAGAGAC TACAGAGGCC ACCTAGACCA ACAAACCTCTG CCATCAGGTC CTTGAATCAT	180
TGCTACCATG TCCTGGTGGT GGTGTAGCA TTGCTAGTGA TATGTAATC ATTACCTACT	240
TATGCAAACC ATCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 638 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

GGATGGCTAC	GGCAGGGGGT	GGCTCTGGGG	CTGACCCGGG	AAGTCGGGGT	CTCCTTCGCC	60
TTCTGTCTTT	CTGCGTCCTA	CTAGCAGGTT	TGTGCAGGGG	AAACTCAGTG	GAGAGGAAGA	120
TATATATCCC	CTTAAATAAA	ACAGCTCCCT	GTGTTTCGCCT	GCTCAACGCC	ACTCATCAGA	180
TTGGCTGCCA	GTCTTCAATT	AGTGGAGACA	CAGGGGTAT	CCACGTAGTA	GAGAAAGAGG	240
AGGACCTACA	GTGGGTATG	ACTGATGGCC	CCAACCCCC	TTACATGGTT	CTGCTGGAGA	300
GCAAGCATT	TACCAGGGAT	TTAATGGAGA	AGCTGAAAGG	GAGAACCAGC	CGAATTGCTG	360
GTCTTGCACT	GTCTTGACC	AAGCCCAGTC	CTGCCTCAGG	CTTCTCTCCT	AGTGACACT	420
GCCCAAATGA	TGGGTTTGGT	GTTTACTCCA	ATTCCNATGG	GCCAGAGTTT	GCTCACTGCA	480
GAGAAATACA	GTGGAATTCG	CTGGGCAATG	GTTTGGCTTA	TGAAGACTTT	AGTTTCCCCA	540
TCTTTCTTCT	TGAAGATGAA	AATGAAACCA	AAGTCATCAA	GCAGTGCTAT	CAAGATCACA	600
ACCTGAGTCA	GAATNGGTCA	GCACCAACCC	GACTCGAG			638

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

GCGAGCTCGT	GTTTAAAGG	ACCAAATAGA	AGTTTACCAG	GAGAGAAGTG	ACAGAAGTGC	60
TGTCTAGATA	GAGGAAGGC	ACACACAGAT	GCAAGCATGT	GCAGAAATGA	GCAAACCACT	120
GAGACGCTGC	CTTGAGCTCT	GTGTCACACT	GCTATGTTGC	AGCCTGGGAG	GCTGTTCCCA	180
GTTGAGCCCT	TCGGAACCAG	CCATGAGATG	GCACGGGTAC	GCGGAAGGGA	GCAGTCTCCA	240
TGGCTGGGTG	GTGATGGGGG	CTTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GGTCTCTCGC	CGCCGGAGGA	AGATGAGGCT	GAAGATTGGA	TTCATCTTAC	GCAGTTTGCT	60
GGTGGTGGGA	AGCTTCCTGG	GGCTAGTGGT	CCTCTGGTCT	TCCCTGACCC	CGCGGCCGGA	120
CGACCCAAGC	CCGCTGAGCA	GGATGAGGGA	AGACAGAGAT	GTCAATGACC	CCATGCCCAA	180
CCGAGGCGGC	AATGGACTAG	CTCCTGGGGA	GGACAGATTC	AAACCTGTGG	TACCATGGCC	240
TCATGTTGAA	GGAGTAGAAG	TGGACTTAGA	GTCTATTAGA	AGAATAAACA	AGGCCAAAAA	300
TGAACAAGAG	CACCATGCTG	GAGGAGATTC	CCAGAAAGAT	ATCATACTTC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCGGCC	TTCATGGCCT	ATCCTCTGCC	AAGACCAAAA	GGAAAGAAGA	AAAAGGGCCA	60
AAAGCCAAAA	TGAAACTGAT	GGTACTTGTT	TTCACCATTG	GGCTAACTTT	GCTGCTAGGA	120
GTTCAGCCA	TGCCTGCAAA	TCGCCTCTCT	TGCTACAGAA	AGATACTAAA	AGATCACAAC	180
TGTCACAACC	TTCCGGAAGG	AGTAGCTGAC	CTGACACAGA	TTGATGTCAA	TGTCCAGGAT	240
CATTCTGGG	ATGGGAAGGG	ATGTGAGATG	ATCTGTTACT	GCAACTTCAG	CGAATTGCTC	300
TGCTGCCCAA	AAGACGTTTT	CTTTGGACCA	AAGATCTCTT	TCGTGATTCC	TTGCAACAAT	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GATTTCTTAC	CCAAAGCTCT	GGAATTGTAC	ATTTATTTTT	TAAACTCAA	AGAGGGAAAG	60
AGCCTTGAT	CATATGTGAA	CATTGTATCA	TAGGTAATGT	TGTACAGACC	CTTTTATACA	120
GTGATCTGTC	TTGTTCTGTC	AGCAAAAATC	CTCTATGGAC	ATAGGAGGTG	CTGTGTCCCA	180
TGCCCTCTTG	CCCTGACAGT	GTCCCATGGG	CCCCCTTCTG	CTCCCTGCCC	CCTCCCTGCT	240
ACTGCTGATG	CACTCCCCC	CCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GCGATTGAAT	TCTAGACCTG	CCTCGAGACC	TGGGGGGAGA	TTGGGCTCCC	TTTCCTCATG	60
ACATCCTGCC	CTATCAGGAC	TCTGGAGATA	GTGGGAGCGA	CTACCTTTTC	CCAGAAGCTA	120
GTGAAGAATC	AGCAGGCATC	CCGGGAAAGT	CAGAACTTCC	CTACGAAGAG	CTGTGGCTGG	180
AGGAAGGCAA	GCCCAGCCAT	CAGCCTCTCA	CTCGCTCTCT	GAGCGAGAAG	AACAGATGTG	240
ATCAGTTTAG	AGGTTCTGTC	CGATCCAAAT	GTGCGACTTC	TCCTCTTCCC	ATCCCTGGGA	300
CTCTGGGAGC	AGCAGTGAAG	TCTTCAGATA	CTGCCCTACC	TCCACCTCCA	GTGCCTCCCA	360
AATCTGAAGC	CGTCAGAGAA	GAATGCCGGC	TCCTGAACGC	CCCACCTGTT	CCACCCCGAA	420
GCGCACTCGA	G					431

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GCCTGCCCCC	ACCTTACAGG	TCTGGGATGT	ACCTTTCCAT	CTGTTGCTGC	TTTCTTCTAT	60
GGGCCCCTGC	CCTCACTCTC	AAGAACCTCA	ACTACTCCGT	GCCGGAGGAG	CAAGGGGCCG	120
GCACGGTGAT	CGGGAACATC	GGCAGGGATG	CTC3ACTGCA	GCCTGGGCTT	CCGCCTGCAG	180
AGCGCGGCGG	CGGAGGGCGC	AGCAAGTCGG	GTAGCTACCG	GGTGCTGGAG	AACTCCGCAC	240
CGCACCTGCT	GGACGTGGAC	GCAGACAGCG	GGCTCCTCTA	CACCAAGCAG	CGCATCGACC	300
GCGAGTCCCT	GTGCCGCCAC	AATNCCAAGT	GCCAGCTGTC	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GGGGCAGAAG	TTGAATATAC	CGGCAATTTT	GCGAGCACCC	AAGGAGAGAA	AACCAAGTAA	60
AAAAGAAGGA	GGCACACAAA	AGACATCTAC	TCTTCCTGCA	GTACTTTATA	GTTGTGGGAT	120
TTGTAAGAAG	AACCATGATC	AGCATCTTCT	TTATTGTGT	GATACCTGTA	AACTACATTA	180
CCATCTTGGA	TGTCTGGATC	CTCCTCTTAC	AAGGATGCCA	AGAAAGACCA	AAAACAGTTA	240
TTGGCAGTGC	TCGGAATGTG	ACCAGGCAGG	GAGCAGTGAC	ATGGAAGCAG	ATATGGCCAT	300
GGAAACCCTA	CCAGATGGAA	CCAAAACAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GCGATTGAAT	TCTAGACCTG	CCTCGAGATC	CCCATGACTC	CTACATCCTC	TTTGTGTCT	60
CCGCCACCAC	CCACTGCCTC	ACCTCATTCC	AACCGGACCA	CACCGCCTGA	AGCGGCCCAG	120
AATGGCCAGT	CCCCCATGGC	AGCCTGTATC	TTAGTAGCAG	ACAATGCAGG	GGGCAGTCAT	180
GCCTCAAAAG	ATGCCAACCA	GGTCACTCC	ACTACCAGGA	GGAATAGCAA	CAGTCCGCCC	240
TCTCCGTCTT	CTATGAACCA	AAGAAGGCTG	GGCCCCAGAG	AGGTGGGGGG	CCAGGGAGCA	300
GGCAACACAG	GAGGACTGGA	GCCAGTGAC	CCTGCCAGCC	TCCCGGACTC	CTCTCTGGCA	360
ACCAAGTCCC	CGCTGTGCTG	CACCCTCTGC	CACGAGCGGC	TGGAGGACAC	CCATTTTGTG	420
CAGTGCCCGT	CCGTCCCTTC	GCACAAGTTC	TGCTTCCCTT	GCTCCAGACA	AAGCATCAAA	480
CAGCAGGGAG	CTAGTGGAGA	GGTCTATTGT	CCCAGTGGGG	AAAAATGCCC	TCTTGTGGGC	540
TCCAATGTCC	CCTGGGCCTT	TATGCAAGGG	GAAATTGCAA	CCATCCTTGC	TGGAGATGTG	600
AAAGTGGAAG	AAGGAGAGCG	ACTCGAG				627

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAAC	TTTGAC	ACCT	ACACTT	AAATT	CTGAG	TCATT	AAACA	GGC	CTACATT	TATCA	ACTGT	60
GGAA	AATATCA	GCCAG	TTTTT	GCAA	ACCTCT	TCTTA	GGACA	CTA	AGTTGTT	TGCAG	AAATC	120
ACTA	GCA	TG		ACTG	ACTCAG	CAACA	ATGTG	GTT	TATATTCT	TTGAT	TAACT	180
TCTT	GGTCAA	GAGT	CAGTAG	ACAG	GACTGA	AGCT	TATGCC	CCTT	GCCCCC	CCACC	ACCAC	240
TCCAT	TACTA	CCAC	CTTGGT	TTAG	CCATCC	TTTCT	TGATC	TGTT	CTCCCC	ACTT	CTACTG	300
TGCT	ACTCTA	CAGAC	TTGCC	CTGA	ATGTAA	GAGCA	ACAAT	TAC	CTTGTA	AGTCC	AAGTT	360
GGGG	CAGGTC	ACTCC	CAAAC	TCCAC	AACCT	CGAG						394

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 381 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

CAGAT	GTTC	GATAT	ATCTT	GAATTT	TCTA	CGAAC	ATCCA	AACTC	CTCAT	TCCTG	ATGAT	60
TTCA	AGGACT	ACACT	TTTGT	ATATG	AAGAG	GCAA	AATATT	TTCAG	CTTCA	GCCCA	TGTTG	120
TTGG	AATGG	AAAG	ATGGAA	GCAGG	ACAGA	GAAAC	TGGTC	GATTT	TCAAG	GCCCT	GTGAG	180
TGCCT	CGTCG	TGCGT	TGGC	CCCAG	ACCTC	GGAGA	AAAGGA	TCACG	CTAAG	CGGTG	ACAAA	240
TCCTT	GATAG	AAGA	AGTATT	TCCAG	AGATC	GGCGA	CGTGA	TGTGT	AACTC	TGTCA	ATGCA	300
GGCTG	GAATC	ACGAC	TCGAC	GCACG	TCATC	AGGTT	TCCAC	TAAAT	GGGCTA	CTGTC	CACCTC	360
AACTC	AGTCC	AGGT	CCTCGA	G								381

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 309 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

GGTG	ACGCCT	GCTT	CACATC	TCTA	ATGAAC	ACCCT	CATGA	CGT	CGCTACC	AGCA	CTAGTG	60
CAGCA	ACAGG	GAAGG	CTGCT	TCTGG	CTGCT	AATGT	GGCCA	CCCT	GGGGCT	CCTCA	TGGCC	120
CGGCT	CCCTTA	GCACCT	CTCC	AGCT	CTTCAG	GGAAC	ACCAG	CATCC	CGAGG	GTTCT	TCGCA	180
GCTG	CCATCC	TCTTC	CTATC	ACAGT	TCCAC	GTGGC	GCGGG	CCACC	CCGGG	CTCAG	ACCAG	240
GCAGT	GTCTAG	CCCTG	TCCCC	TGAGT	ATGAG	GGCAT	CTGGG	CCGAC	CTGCA	GGAGC	CTGAG	300
TTCT	CTGAG											309

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 374 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

GCACTATTAA	ACAGATACAA	CACAGAATAG	TATGTATAGA	GCATGGTATG	TAGCAGGGGC	60
CTATTCCTGT	CTGAGTGGAC	AAGGAGGCTT	CCTAGAGGAA	GCAACATTTA	AAGCTGAGGG	120
CTGAAGGATG	AATAGGATTT	AACCAAGTAA	AAGTAAGAAA	GGAAGTGGGG	AGCTGGAAAG	180
GGCATTCCAG	GAAGAAGAAA	CTGCATGTGC	AAAGGCCAGG	AGGTCAGAGC	GCACAGTGGA	240
TATGACGATG	TGGCTAGCTG	AGCATGTCTG	TGCAGTGTCA	ACTTTGTTGT	GAACACAGAG	300
GGAGGCTACT	GGGAAATTTT	AAGCAAGAGA	GTTGGAGTAT	GATCACATTT	GCATGTTAGA	360
AAGACACACT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

GAATTCGGCC	TTCATGGCCT	ACATATTTAT	TATGTCAACC	TGTACTTCCC	TTCCTCTCTT	60
CCTCTCCCTC	TTTTCTCTCC	CTCTCCCTCT	CTCTCTCTTC	CTTCTCTCCC	TTCCAGGTAC	120
CCTAGATGAA	CCATGGGAGG	TCCTGGGTAC	ACAGCCATTC	TGTCTGAGAG	AGTCTGAGGA	180
CTCTGAGACC	CAGCCTTTTG	ACACGCACCT	TGAGGCCATAT	GGACCTTGCC	TGTCTCCACC	240
TAGGGCAATA	CCAGGAGACC	AACATCCAGA	GAGCCCAGTT	CACACAGAGC	CAATGGGGAT	300
TCCGGGCAGG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 417 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

GGAACCACTA	ATTCCGGACA	CACTGGGATT	ACAGTTCAG	GAAGGATGTT	ACCTTTGACG	60
ATGACAGTGT	TAATCCTGCT	GCTGCTCCCC	ACGGGTCAGG	CTGCCCAAAA	GGATGGAGTC	120
ACAAGGCCAG	ACTCTGAAGT	GCAGCATCAG	CTCCTGCCCA	ACCCCTTCCA	GCCAGGCCAG	180
GAGCAGCTCG	GACTTCTGCA	GAGCTACCTA	AAGGGACTAG	GAAGGACAGA	AGTGCAACTG	240
GAGCATCTGA	GCCGGGAGCA	GGTCTCTCTC	TACCTCTTTG	CCCTCCATGA	CTATGACCAG	300
AGTGGACAGC	TGGATGGCCT	GGAGCTGCTG	TCCATGTTGA	CAGCTGCTCT	GGCCCCTGGA	360
GCTGCCAACT	CTCCTACCAC	CAACCCGGTG	ATCTTGATAG	TGGACAAAGT	GCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 222 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC	TTCATGGCCT	ACTGAGAAAA	AAAATCAAAT	CTAATTTTAA	AATGAAGGTA	60
TTTAAACCA	TGGCACAAGG	GAGCCTTATT	TATGGAGCTG	GTGGGAAGCC	AGGATGTTTC	120
CAATCCGCTG	CTCTTACAGG	AGCCTGTGCC	TCGCCAGTTC	TGTGCTGCAG	TGGGCAGCCA	180
ACTGAAGTGC	ATGAGTCAAA	TGCACGAAGC	AGCAGACTCG	AG		222

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GCTGCCTCCA	TACTGTTTTA	GGCAGCACCG	TTTATGTGAC	AGAGTCCGTG	TTTCTCAAAT	60
GCATGGTGTT	CCTCAGGTGG	AGAGTGGGCA	GAAGTTTGTG	CAACACTTTT	TTTTTAAGTT	120
ATTGGGTGCA	AAATCCCAAA	CCAGGATATG	TGTATGTCTG	TGTGTTTATG	TTTTTTATT	180
GACCCTCCCC	TCTTTCAACC	TACCCCTTTT	TATATCTAAT	GTAAGAAAAG	CGAAATTGAA	240
TCTGGAAGAA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTTAAAA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1463:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTCGGCC TTCATGGCCT AAGTTTATAA AAATTTTCAGC CAGAAAAACC CAGGTAAGGA	60
TTTTTTTAT TTTTTTTTA TTTTATTTT TAGACCAGGT GAGAATCCTT TGTTCCACTG	120
AGATTTTAAA ATTTAGTACA TTCAAAATTG ATATTTCTAC CATTTTCTCA GCCTGCTTGT	180
CTTCTTATCT TTGCAGCACT GCTTATTGCC ATCACTGCTT ATCTGTTTAC TCAACTTGAA	240
ACCTCAGAAT TGTCTTGAC CTCATCCCCA CATCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:1464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC TTCATGGCCT AGGCCATTG GTTCTAAACT GCTTGACTAG TTTAAGCTC	60
ACATAATTCC TTAAGCTTTC ATATTTTCTT AAATGCAAGG AAATGAATAT AAAAGCACTA	120
AATCTCCTGG TTTCACTGGTA CAAAAATTAC AATGGTCAGT TCCCTTAGGT CATCAAAAC	180
TAGTCACAAA AATAGTTCTT GTATTCAACC TGAATGTGCC ACAGGAAAAA AAAAAATTTT	240
TCAAGATTTT CCAGCTCAGC CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC TTCATGGCCT AAACATTTTC TGA AAAACGT GATAGAAAGA AGGAGGAGCT	60
GTTTCTAGGA GGGAAATAAA TAATTTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA	120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCCATTC CCAATTTTAC TTCTCGTCCC	180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC	240
AGACCCAGTC ACCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:1466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GCGCCTATCA CAAGCAGATC ATGGGTGGCT TCAAGGAGAC GAAGGAGGCT GAAGATGGCT	60
TCCGCAAGGC CCAGAAGCCT TGGGCCAAGA AGATGAAGGA GCTGGAGGCA GCCAAGAAGG	120
CCTACCATTG GGCTTGCAAA GAGGAAAAGC TGGCCATGAC ACGGGAGATG AACAGCAAGA	180
CGGAGCAATC GGTACACCT GAGCAGCAAA AGAAGCTGCA GGACAAAGTG GACAAGTGCA	240

AGCAGGATGT GCAGAAGACA CAGGAGAAGT ATGAGAAAGT GCTGGAAGAT GTGGGCAAGA 300
CCACACCCCA GTACATGGAG AACAACTCG AG 332

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GCTCGAGATG TGCTGTCTTC CATGCAAAGT GGAATTTGAC AATCACTGTG CCGTGCCTTG 60
GGACATCCTG AAAGCCAGCA TGAACACATC CTCTAATCCT GGGACACCGC TTCCGCTCCC 120
CCTCCGAATT CAGAATGACC TCCACCGACA GCAGTACTCC TATATTGATG CCGTCTGTTA 180
CGAGAAACAG CTCCATTGGT TTGCAAAGTT TTTCCCTAT CTGGTGCTCT TGCACACGCT 240
CATCTTTGCA GCCTGCAGCA ACTTTTGCT TCACTACCCC AGTACCAGTT CCAGGCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC TTCATGGCCT AGTGAAAAAT GGGAGGCATG AAATACATCT TTTCGTTGTT 60
GTTCTTTCTT TTGCTAGAAG GAGGCAAAAC AGAGCAAGTA AAACATTCAG AGACATATTG 120
CATGTTTCAA GACAAGAAGT ACAGAGTGGG TGAGAGATGG CATCCTTACC TGGAAACCTTA 180
TGGGTTGGTT TACTGCGTGA ACTGCATCTG CTCAGAGAAT GGGAAATGTG TTGCAGCCG 240
AGTCAGATGT CCAAATGTTT ATTGCCTTTC TCCTGTGCAT ATTCCTCATC TGTGCTGCCC 300
TCGCTGCCCA GAAGACTCCT TACCCCACTG GAACAATAAG GTGACCAGCA AGTCTTGCGA 360
GTACAATGGG ACAACTTACC AACATGGAGA GCTGTTGTA GCTGAAGGGC TCTTTCAGAA 420
TCGGCAACCA CTCGAG 436

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC TTCATGGCCT AGTCTGGGCA ACAGAGCGAG ACCTTGCTCTC AAAAAAAAAA 60
AAAAAAAAAC AAAGTAAAAA AAGATATGTG TTTGATTAAT AACAGTCCTG ATTTAAAAACA 120
ACAGCACTGT CTTTGTAGCC TTTACTCAGT ATGCAACTCC TTTATACAGA TTTTATTTTA 180
ATTTTATAA CACTGCTT GAGAAGCATA TTTATTTCCG TTTTGTGTG TGCATGTGGT 240

GGACAGGAAA CAGTGGTTCA GAGAGATGAA GCACCCTGCC CACCACATGC ACTCGAG

297

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAATTCGGCC	TTCATGGCCT	AGGACCTATT	CTATCAGCAG	CATTTGACAC	CACTGATTAC	60
TCATTCTGCT	CTGGTGTACT	TTCTTCAATT	GCTTCCAAGA	CACCATAAAT	TCTTCTGCCT	120
TGCTGGCTGC	CTTTGCTGGT	TCCTCCTCTT	CTCCCTGACC	TCTTAATGTT	GGAGAACCAC	180
AGGGCTTAGT	CCTTGGTCCT	CTTCTCTCTT	TTCTTTACAC	TGTGGTCCTC	AGTGAGGGAG	240
ATAGGTAGAT	CCACTGTCCC	GATCTTAACC	CAAAGAAAGA	CTTGCTGTCC	AGCTACGGGG	300
GCTGTGGTCA	GAAGGCAGCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGAT	GGGAAATGCC	TGCATTCCCC	TGAAAAGAAT	60
TGCTTATTTT	CTATGTCTCT	TATCTGCGCT	TTTGCTGACT	GAGGGGAAGA	AACCAGCGAA	120
GCCAAAATGC	CCTGCCGTGT	GTACTTGATC	CAAAGATAAT	GCTTTATGTG	AGAATGCCAG	180
ATCCATTCCA	CGCACCGTTC	CTCCTGATGT	TATCTCATT	TCCTTTGTGA	GATCTGGTTT	240
TACTGAAATC	TCAGAAGGGA	GTTTTTTATT	CACGCCATCG	CTGCAGCTCT	TGTTATTCAC	300
ATCGAACTCC	TTTGATGTGA	TCAGTGATGA	TGCTTTTATT	GGTCTTCCAC	ATCTAGAGTA	360
TTTATTCATA	GAAAACAACA	ACATCAAGTC	AATTTCAAGA	CATACTTTCC	GGGTACTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	TTCATGGCCT	AGTACTCCAT	CTCATCCATC	TCATGGTAGT	TCAGAAATGC	60
CTATATTCCT	TCTTAAATTC	ACCAGGATTT	TTGTTTTTTC	TTTCACCCCC	TTTTTGCCTT	120
TCTTATTTTC	ATCCTTCCAT	TCACTCATT	TCCACTCATG	TTTAGCAGTT	TCTATCCTTT	180
TCTTTCCTGG	CGTTTTAGCG	TCACACATAG	AAACCTATCA	CCATCAGCCC	TCG	233

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

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GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTTA ATTTGAAGAT      60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAAACTT      120
TATTTTAA   GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC      180
TCTGATCGTG ATAACCTCCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG      240
CGATATCCTC GAG                                     253

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(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

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GAATTCGGNC TTCATGGCCT ACCGCAAGTT CCTCCTGACC TTCAGGGAGC CTGACTTAGA      60
GAAGAAGTAC TCCAAGCAGG TAGACGACCG ATTTGGTGCC TATGTGGCGT GTGCCTCGCT      120
CGTCTTCCTC TTCATCTGCT TTGTCCAGAT CACCATCGTG CCCCCTCCA TATTATGCT      180
CAGCTTCTAC CTGACCTGTT CCCTGCTGCT GACCTTGGTG GTGTTTGTGT CTGTGATCTA      240
CTCCTGCGTA AAGCTCTTCC CCTCCCCACT GCAGACCCTC TCCAGGAAGA TCGTGCGGTC      300
CAAGATGAAC AGCACCCTGG TTGGGGTGTT CACCATCACC CTGGTGTTC TGGCGGCTTT      360
TGTCACATG  TTCACGTGCA ACTCCAGGGA CCTGTGGGC TGCTTGGCAC AGGAGCGTCT      420
CGAG                                     424

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(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

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GAATTCGGCC TTCATGGCCT ACTCTGTGTT GGTAAGTAAA AGCCCTCCAG CATAGGTATA      60
CACTTAGTGT TTCCTTCCAG TGGTTATCAT ACTTCTTTTC TTGCCATAGT TACATGCTAA      120
CAACGTCCA  AAGCTATAGT TGCTCTGCA TTTTGTCTT AATTCTTGTA AGATAAACTA      180
ATAATACAGG GAGTAAATGT GCACTGTTTA TTAATAAAA TCCCCGGGAC ACGGGATAAA      240
CTGAAGGAAA TCGTGCTTTT TGAAAAGTAG GTGTAGCTTG CCATGCTGCA TTGCTCTATA      300
CCCACAAAAC TCGAG                                     315

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(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

```

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGATT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTGAGAACAA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCCGGGCAG      180
CCCCCTCTCC CTGCTGACCT CAACAAGGCG TGTGCTATTG TTTTATTATT TATTATTATA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCTT TTTCCCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

```

GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTGTGTGCA      60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAT AAGGAAGCAA GGTAATAAAA      120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA      180
TGAAATCAC  AAAAAATATA AGGAGACTCC TCGAG                                     215

```

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

```

GAATTCGGCC TTCATGGCCT AATCGGTCTC CTTGGGAGAG ATCACTAGAA CAGAAAAACA      60
ACCCAGATTA TAACTGGAAT GTTCGGAAAA CATAAAGGAC AGCTCGTAAA GGAGAGAGTA      120
AGAGTCACCA AACACGTGGA TATTTTGGT CTGATCCTAC AGTAGCCGGT TATCTAGACC      180
AGTAAGTGGA GTTTTGACA TGCTGCTGCT GTCAACTCAC TGGCTGAAGG AGCACTTCAA      240
GGAAATGGGAG GCCTTTCCT GGGTCCAGCT CTGATTCGGA TCACTCTCGA G               291

```

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC	TTCATGGCCT	AGAGAAAGAA	ATGGCTCGAA	CAGAAAACAG	TGGTCTTGAA	60
AGGCAACGCA	ACAGTAGGTT	ACAAATAGCA	TTAGCTTTTT	CTTTAAAGAA	ATTCAATTGTA	120
ACCAGTGAAG	GATAAGATTT	TAAATTAGAA	AAATGGAAAT	CCTATGAATA	AAAAACTAGT	180
AAGCTTGAGA	GCAGAATCAC	TGTGGAAAAA	AAACAGATTG	AAAAATAACT	TGCAGGTATC	240
ATAGACAGGA	AATTGCCACT	AGAGAAAAACA	GGAAACTTGT	GATAGATAAA	AATGAAGTAT	300
TTTCATTGG	AACAAGAGAC	CAACTGAAGA	GAGATCAAGT	GAAGGGGGTT	TATTTTAATG	360
AAACACAAAG	ATTCTTGTGG	AAATCAAAGT	GCCGGAGCCA	GAAACAGGGC	TCAACCTTCA	420
AGATTAGAGC	TGTATTCAAG	TTGTTCAAGT	TGGCTCTCGG	TCCCAAAGCA	ACAGCAATGT	480
CACTAAGGTT	ACAAGTAAAA	GGTAAGCCCT	CGAG			514

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCTAGA	CCTGCCCCCTC	CACTGCTCCC	CATACCTGG	CACGATGCGT	TCCTGGTCAC	60
TGATCACCAT	CATTTTGGGA	AGAGAATCCC	AATCCCTGGC	ACCTGGGTTT	GCCTCATCCA	120
ACCATCCTTC	CCTTTCTCAG	CTGCACCCCC	TCTGCAGATC	TGAAGACACA	CCTCACTCTT	180
CCAGGGCCCT	CGAG					194

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GACGCGCCCG	GCCTCCTCTT	TCATTTCAGT	ATACGTAATA	AGAAGTCAGA	AATTACCTTT	60
AACCAAGCCT	GGAAATCTCC	TTATCTAGAT	CATTATATTC	TTTAGGTACA	TTTTTTACTT	120
TCTACATTAC	CACTCACAAC	AATATTGCTA	AATTTTTC	TCTAAATAAG	AAGGATTCCC	180
TTTTTCTAAT	AACACTTTCT	TTATTTTCT	TTAACCTTTC	ACTGAAAGCC	CCCTCAAAG	240
CTACCTGGCT	TATGCTAACA	GTATGTTTGA	TGTCCTTTCA	ATACTACTCT	GTTTCCATCT	300
GTCTAGCATC	CACCTGCCTC	CCAATCTCAA	AGTCTCCATC	ATATTTTGTC	AGTTTTTAGT	360
TTTTTTGTTA	TGGTGCAACC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC	TTCATGGCCT	AGGTTCTGGG	ATAGCTGATT	GTTGGCCACC	CCCGCCCTGG	60
AATGGAAACC	CTGTAGGCC	AGGGCCAGAG	CAGGTGGCCA	TGAAGCAAGA	CGGCAAAGGC	120
ATTGGAGGAT	GTCCACCTC	CACACATACG	CCCAGGCATT	TCTTGGCTGG	GGAAATGGTGT	180
TACAGGATCC	ACAAGCACAG	AGATGGGAAA	ACAGTGTGTC	TGGGGAACAC	CAAGAGTTGG	240
GGTTGCCTGG	AGGACAGATA	GACTCAGGGG	GGACATCCAG	AGGTAACACT	AGGTCCGCAG	300
GTGGGTTTCA	AGGCCCCAGC	TCTATCCCCT	TATTCACAGC	CGGATTAAAG	AATAATCTGA	360
GTATGGTTCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

GAATTCGGCC	TTCATGGCCT	ATGGATCCAT	CATGGGACAA	TTACTAGTTA	TTACTTTTCC	60
TCCGCTTCAG	AAGGTTTTTC	AGACTGAGAG	CCTAAGCATA	CTGGATCTGT	TGTTTCTTTT	120
GGGTCTCACC	TCATCACTGT	GCATAGTGGC	AGGCCTGGTC	AGTAATCTTC	TCTACTGTTA	180
TAGTACAGCA	GCTTTTAGGT	CCACTGATTG	CATTCTTAAT	TTGAGTATTT	AATATTTATT	240
TTATTAACCT	AAGGTTTTCA	TTTGTCATA	TAGCATGGTC	TCATAATTTT	CAAAAAATCA	300
GAAACAGTA	GATGTTGGCG	TGGATGCAGT	GAACAGGGTT	ACTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 709 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC	TTCATGGCCT	ACGAGAATAT	TGTGGAGAAC	TGGTCAGTAG	AAGAACAAGC	60
AATGGAAATG	GATTTGAGTG	TCCTTCAACA	GGTAGAAGAT	CTAGAAAGGA	GAGTTGCATC	120
AGCAAGTTTG	CAAGTGAAGG	GTTGGATGTG	TCCAGAGCCT	GCATCAGAAA	GGGAGGACTT	180
GGTATATTTT	GAACATAAAT	CATTACTAA	ATTGTGCAAG	GAGCATGATG	GAGAATTTAC	240
TGGCGAAGAC	GAAAGCAGTG	CACATGCACT	AGAACGGAAG	AGTGACAACC	CCCTAGATAT	300
AGCTGTAACC	AGGCTGGCTG	ATTGGAGCG	GAACATTGAA	AGAAGGTATC	TGAAGAGCCC	360
CTTAAGTACC	ACCATTCAGA	TCAAACCTGA	TAATGTGGGC	ACAGTTACTG	TCCCTGCTCC	420
TGCACCATCC	GTTAGTGGTG	ATGGTGACGG	AATGAAGAG	GATATTGCTC	CAGGGCTCAG	480
GGTATGGAGA	AGGGCATTAT	CAGAAGCTCG	CAGTGCTGCA	CAGGTAGCTC	TGTGCATTCA	540
GCAATTACAG	AAATCAATAG	CATGGGAAAA	ATCAATTATG	AAAGTTTACT	GCCAAATCTG	600
TCGAAAGGGA	GATAATGAAG	AACGTCTTCT	TCTTTGTGAT	GGCTGTGACA	AAGGCTGTCA	660
TACCTACTGC	CATAGACCCA	AGATTACAAC	AATCCCAGAT	GCTCTCGAG		709

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```
GAATTCGGCC TTCATGGCCT ACTGTTTCAG AACTTCCGTA CCTTTTCTT GTATGTAGCA    60
CGTATAAATG CAGCTGTCAT GCAGTTCTTT TCTTTTGCTA GAAAATTAGT CAGGAGGTAA    120
GATGAATCTT CCAAAGTTAT GTTAAATTTT GTTTAACTTG ACAAATTAAA CTITGTTCTT    180
ATTAAACAAA TACGTAAACA AATACTGGAA AAGCAAAGCT TATATTTGGG AGTAAATGT    240
ATCTTAAAT GCATGTTCAA CTTTGCTCG AG                                272
```

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```
GAATTCGGCC TTCATGGCCT ACCGAGGACG AGGGGAAGAT GTCACGCAAG ATAGAAGGCT    60
TTTTGTTATT ACTTCTCTTT GGCTATGAAG CCACATTGGG ATTATCGTCT ACCGAGGATG    120
AAGGCGAGGA CCCCTGGTAC CAAAAGCAT GCAAGTGCAG TTGCCAAGGA GGACCCAATG    180
CTCTGTGGTC TGCAGGTGCC ACCTCCTGG ACTGTATACC AGAATGCCCA TATCACAAGC    240
CTCTGGGTTT CGAGTCAGGG GAGGTCACAC CGGACCAGAT CACCTGCTCT AACCCGGAGC    300
AGTATGTGGG CTGGTATTCT TCGTGGACTG CAAACAAGGC CCATCTCGAG            350
```

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

```
GAATTCGGCC TTCATGGCCT AGTACCTGAA GGCCTTCAAG GTGGCCTACA GCCTTAATGG    60
ACACGAATTC GATTTCATCC ATGATGTTAA TAAAAACAC AAGGAGTTTG TGGGTAAGT    120
GAACAAAAAC GCGGTGCATG TCAACCTGTT TGAGACCCCT GTGGAGGCTC AGTACGTGAG    180
ATTGTACCCC ACGAGCTGCC ACACGGCCTG CACTCTGCGC TTTGAGCTAC TGGGCTGTGA    240
GCTGAACGGA TGCGCCAATC CCCTGGGCGT CTCGAG                                276
```

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	TTCATGGCCT	AGTGGAGATT	ACTTGGCACC	ACTCTCCTTT	CACAGAGCAG	60
AGTCTGAATA	GTCTTCAGAG	ATAGGCCTGT	GGGCCAGATT	GCCATCCCCT	ATGGACCAGA	120
AGCCAAGGAT	CTCTCTAGTG	ATGGTCAGAG	GGCCCAAATG	GCAGGGATAC	CCAGTGATGT	180
CAGGAGGAAT	AGTACAGACA	GAAGGTGCTA	AGCAGACAAT	TCAACTGCCA	TGTTTGGCCA	240
CCCCCTGTGA	GCAGGGATTA	GGTGTTCAGG	CCAGTATCTT	GGGCATGGGG	GAGCCTTTGG	300
CCAGAAGAGG	TATAAAGCTC	AGAAGTTTTT	CAGTCTGATA	ACTATTGATA	TAATTTCCAT	360
AGTGTGAGGG	AGCGGTATGC	TCTACCCTTG	TGTATTTAAG	GCAGGACAGA	GAAATTGAGG	420
ATGCCCTGG	GGCTAGATCG	ATGATATGAC	CAGAAATCAA	AAAGGGAATG	CATTATTTAT	480
TGCTGTGTAA	CACTGTTAAG	AGAGGAGGTA	GTTAAGGGAT	GGATAGGCAC	ATAGAGAGGG	540
AAGGTCTCAG	GAGAAGGGAT	AGAAAGGAAC	TATGTTTACA	AGAACAACAC	TCGAG	595

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	TTCATGGCCT	ACAATTTAAT	AGTATAACAA	ATCCCCTAGA	ATAGTAGAGG	60
AGAGAGGAAT	CTTCCCCTGA	TATGTTTTTG	TAATACTTCT	TCCTCCTCTT	CAGTCAATAG	120
GGAAATGTTT	GTTGAAAGAC	TACTTTGCAG	ACATTTAGAA	AGATACAGAG	TAAGTGTAAG	180
ATGTCCCTCC	TTGTCCCTGA	GGAGTCTCTA	GTCAGGCACA	GGTAGGACTA	AATGAAAAAC	240
AACTACAGAA	CTAAGTAGAA	GAGTGTACAA	TAATATGGGG	AATGTGGAAC	ACTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTCGGCC	TTCATGGCCT	ACTTACTTTT	CCAAAGAATT	TTTTCCACCT	GGAATAAGAA	60
GAGAGGACTA	GTTGAAACAT	TTGAGCTGGA	GAGGCTTATG	GGCAATATGA	AGTGGGCCAA	120
ATTCTTGCAA	TACACCCTAT	TCAATTGAAA	GTACAGTGTC	TAAGGATAAG	AATACTTCTT	180
TAAAGACCAA	CAATTGTTTT	AATGCAATCT	TAATTAGTAA	ATGGTTTACA	TTTTTTCTAT	240
TGTTATTGGT	TTTAAATTTT	GCTACCGCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 660 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT ATTGAATTCT AGACCTGCCT CAGGGTAAGG GAGATTTAAT      60
CTTTTCTTT ACTATTTTCT AGTTTCTATG AGCATGGATT ACTTGTGCAA ATCAAAACAA      120
AACAAACGGA TGGCTCATCC GGCAACATC CATGGGCAGG GTTGGTGTG GGTGCTGGAC      180
GCAGAGATGA ATGGAGGGCT CTGGCCTCAG CGGCTCACAG TCTGGTGAGC ATAGACAGTG      240
CTTTCGATGT GAGAGCAGAC CTGAGTGTG CCTGGGACTC CAGGCACAGT TCTCCCTGCA      300
GCTCACAGCA CTACCCCTTA CTGCACCATT AACTTCTACT CTAGCTCACT GCCTCTTAAC      360
TCTGAGCGCC TTGAAGGCAC AAAATGAGTC CCATCTGGGT CTTTAGCAGC TGGCAGAAAA      420
CCTAGCTCAA ACTCATGCTC TAAAAACCCC TGCTGAGGGA GTGGGCGAAT GCAGGCAGCC      480
CTGGCAGTGG GATCAAGTTC AGGGAGTGGC ACTGGAGGCA TCACCCCAAG GCTGAGAAGA      540
CCTTGAAGTG CTGTTCAAGG TTTTGCTGTC TCTCCCAAGG CATGACTCGG CCCAGGAGGA      600
GATGGGGCAG ATGCTGCAGA AGGAGGGTTC ATGCCCTCC ACTGCTGCCC ATGACTCGAG      660

```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCTGTGCTAT CTGTTGTCCA GCATCTGACA CAGTTGGTTT TATATTTTGT CTGGTTTCTA      60
GTTATTAAGC AGGTTAAGTC TGGTTCCTGC TGTTCCTATAT AGCAGGAAGC AAAGGTTCTC      120
TCATGAATTT TTAGCATAAT AACATAAGCG TGGATTCCAA AAATTCATTA CACAGATCCT      180
GGAAATCTGT TTACTATGTT TTATACATTC TGTGAAAGCT GGAGAATATA TATTTGTTTT      240
ACTATGTGTA TCGCAAATAA AATATCAATT TCATGTGCCA GAGAATTGAA TACATTATCA      300
AAGGGTCAAC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GGGACAACAA GCCCATCTGG ATGCACGCAG AGGAGCGGGA GGAAAGCAAG GATAAGCGCC      60
GGGACAGCGC CCCCTATGGG GAATACGGCA GCTGGTACAA GGCCTGTAAA GTAGACAGCC      120
CCACAGTCAA CACCACCTG CGCAGCTTGG GGGCCCTATA CCGGCGCCAG GGCAAGCTGG      180
AAGCCGCGCA CACACTAGAG GACTGTGCCA GCCGTAACCG CAAGCAGGGT TTGGACCCCG      240
CAAGCCAGAC CAAGGTGGTA GAACTGCTGA AAGATGGCAG TGGCAGGCGG GGAGACCGCC      300
GCAGCAGCCG AGACATGGCT GGGGGTGCCG GGCCTCGGTC TGAGTCTGAC CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

GAATTCGGCC	TTCATGGCCT	AGTAAAGGGA	TTTATAATAA	CATTAAAAAT	TTCGTTAGAT	60
TCCAGCTGAG	CACGAGTATA	GCAGCATTA	CTTTAATCTC	ATTGGCTACA	TTAATGAACT	120
TTCTTAATCC	TCTCAATGCC	ATGCAGATTT	TGTGGATCAA	TATTATTATG	GATGGACCCC	180
CAGCTCAGAG	CCTTGGAGTA	GAACCAGTGG	ATAAAGATGT	CATTCTGAAA	CCTCCTCGCA	240
ACTGGAAAGA	CAGCATTTTG	ACTAAAACT	TGATACTTAA	AATACTTGTT	TCATCAATAA	300
TCATTGTTTG	TGGGACTTTG	TTGTCTTCT	GGCGTGAGCT	ACGAGACAAT	GTGATTACAC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:1495:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 258 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

GCTCGAGCGT	TGAGGTCAAC	ACTTCCTCCA	GGGAAAAGGA	TTCCATTAAT	AGATTGAAA	60
AGTATTTTCT	AGTCTTTCTC	TGTAAGATCC	AGCCTTACTG	GTACAACTCT	CGCACCTGCA	120
GACTCCAAGT	ACTTTACATA	GGACGCAGCA	ATATAGTATC	TTCCATAGTT	TTTCATGACT	180
TTATTACGGC	ATTTTTCAT	TAATATTCCG	ATGATGGGCT	TCTTGGCGGT	GTGCGCGTGG	240
GGTCTAGACT	ATCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1496:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

GAATTCGGCT	TCATGGCCTA	CTCTCTTTCT	CCATGTTAAA	CCCCTTGGCA	TGAATGAAAG	60
GCTTTCCCCT	TTATCCTTGC	TGTGTTTATT	CATTGTGTCC	AATGAGCTTC	TGAAGGTAGG	120
AGTAACCTTG	CACATTTTGC	TGTGTGGGCT	GCTGCATCTC	TGCCAAAAGG	TTTATGGGAT	180
TTTTACTCAG	GAGATCCAGG	AAAAGGAGGA	GCCTGGAATC	TAAGCACTTA	TCTCCTGAAA	240
AGGTACAGAA	ACATGTTTGA	GATCTTGAGC	CTCAAGGTGC	TTGCTTCAGA	ATTTTCCTGA	300
TTCTCCCTCT	CCAGACCTAT	TCTGTTCTTG	GGACCCAAGC	TTCTTGGCTC	CAGCCCACTC	360
CCCCACTAGA	GGAGCTGGAA	AGTTTGGTGC	TGTGGTCATA	CCAAAGATGG	GCAACACCCA	420
GACTCCTCAC	CCTCGAG					437

(2) INFORMATION FOR SEQ ID NO:1497:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 516 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

GAATTCGGCC	TTCATGGCCT	AGTGCAGGTC	CTGGTGCTTG	ATGGTCGAGG	CCATCTCCTG	60
GGCCGCCTGG	CGGCCATCGT	GGCTAAACAG	GTACTGCTGG	GCCGGAAGGT	GGTGGTCGTA	120
CGCTGTGAAG	GCATCAACAT	TTCTGGCAAT	TTCTACAGAA	ACAAGTTGAA	GTACCTGGCT	180
TTCTCTCGCA	AGCGGATGAA	CACCAACCCT	TCCCGAGGCC	CCTACCACTT	CCGGGCCCCC	240
AGCCGCATCT	TCTGGCGGAC	CGTGCAGAGT	ATGCTGCCCC	ACAAAACCAA	GCGAGGCCAG	300
GCCGCTCTGG	ACCGTCTCAA	GGTGTGTTGAC	GGCATCCAC	CGCCCTACGA	CAAGAAAAAG	360
CGGATGGTGG	TTCTGTCTGC	CCTCAAGGTC	GTGCGTCTGA	AGCCTACAAG	AAAGTTTGCC	420
TATCTGGGGC	GCCTGGCTCA	CGAGGTTGGC	TGGAAGTACC	AGGCAGTGAC	AGCCACCCTG	480
GAGGAGAAGA	GGAAAGAGAA	AGCCAAGAAC	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 329 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

GCGAGCTCCT	GACCTCAGGT	GATCTACCCG	CCTCAGCCTC	CCAAAGTGTT	AGGATTACAG	60
GCGTGAGCCA	CCGCACCTGG	CACCCCCCCC	CTTTTTTTTT	AATATAAATG	ATCAGTCTTA	120
ACTCCCTAGG	TTATCAGGTT	GAGGGGGTGG	GGATGAGGCT	GGGGGACAGA	TTGTTTTCCT	180
GGCTTCTAGC	TCGGTGTTCT	TTCTGCCTCT	TGCGACAACA	AGGTATGCGT	GTATTGTGGT	240
TGTGGACTGT	GGTTGTGGAC	TGCCTATTCA	CAAGTGGCTA	TGAGGCCCAT	CTGCTGATGC	300
TTTTGGATGC	ACTTGGCGAT	GAAGTCGAG				329

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

GAATTCGGCC	TTCATGGCCT	AGGAGCGCGG	TGGCCACGGA	ACGCTGCCCG	GAGCCGCGCG	60
AGGGAGGACC	CGACGCGCGG	CGTTACCCA	GCGCAGCGTT	CCACCGCTCG	GGTTTGGCTG	120
GATAAAATAA	AAAATGGGGA	TATTGACCTC	CTGTCACTAC	TGCATGGACT	TTGATGGTTT	180
CCAATCATT	CTTTCTCCTC	TGTGTCAATC	TGCCTCTTCG	AGAAATTCAT	ACTCCTGAAT	240
AGCTCTCCAG	ACCCCCAGCT	GGCCATGTGG	TGAGTTCAGG	GCCCCAATCA	AGTAGTACCA	300
GCAATCAGGG	AACTCCTATC	TGTTTGAAT	GGATTACAC	CAGCCACAAG	CCTGGAAAGA	360
TGGTGTCA	ATCTACAGTC	AGGCAGGATT	CTCCTGTGGA	GCCCTGGGAA	GGGATCAGCG	420
ATCACTCGAG						430

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC	TTCATGGCCT	AGCCAAGTCT	GGGAAGCCTT	AAGGAAAGGA	GTGCCCCTCG	60
GCGTCTTGGT	CCTCCTGTCC	CTGCTGCAGG	GGCTGGGGCC	TCCGGAGCTG	CTGCGGGCTC	120
CCCTCAGGCT	CTGCTTCGTG	ACCCGTGACC	CATGACCCAC	AGTGCTGGCC	TCCTGTGGGG	180
CCACTATAGC	AGCCACCAGA	AGCCGCGAGG	CCCTCAGGGA	AGCCCAAGGC	CTGCAGAAGC	240
CTCCTGGCCT	GGCTGTGTCT	TCCCCACCCA	GCTCTCCCCT	GCGCCCCTGT	CTTTGTAAAT	300
TGACCCCTTCT	GGAGTGGGGG	GCGGCGGGCA	GGGCTGCTTT	TCTTAGTCTG	ATACCAAGCA	360
AGGCCTTTTC	TCGAG					375

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ

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NO:1253, SEQ ID NO:1254, SEQ ID NO:1255, SEQ ID NO:1256, SEQ ID

[illegible]

NO:1393, SEQ ID NO:1394, SEQ ID NO:1395, SEQ ID NO:1396, SEQ ID NO:1397, SEQ ID NO:1398, SEQ ID NO:1399, SEQ ID NO:1400, SEQ ID NO:1401, SEQ ID NO:1402, SEQ ID NO:1403, SEQ ID NO:1404, SEQ ID NO:1405, SEQ ID NO:1406, SEQ ID NO:1407, SEQ ID NO:1408, SEQ ID NO:1409, SEQ ID NO:1410, SEQ ID NO:1411, SEQ ID NO:1412, SEQ ID NO:1413, SEQ ID NO:1414, SEQ ID NO:1415, SEQ ID NO:1416, SEQ ID NO:1417, SEQ ID NO:1418, SEQ ID NO:1419, SEQ ID NO:1420, SEQ ID NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID NO:1429, SEQ ID NO:1430, SEQ ID NO:1431, SEQ ID NO:1432, SEQ ID NO:1433, SEQ ID NO:1434, SEQ ID NO:1435, SEQ ID NO:1436, SEQ ID NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ

ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID

NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ ID NO:307, SEQ ID NO:308, SEQ ID NO:309, SEQ ID NO:310, SEQ ID NO:311, SEQ ID NO:312, SEQ ID NO:313, SEQ ID NO:314, SEQ ID NO:315, SEQ ID NO:316, SEQ ID NO:317, SEQ ID NO:318, SEQ ID NO:319, SEQ ID NO:320, SEQ ID NO:321, SEQ ID NO:322, SEQ ID NO:323, SEQ ID NO:324, SEQ ID NO:325, SEQ ID NO:326, SEQ ID NO:327, SEQ ID NO:328, SEQ ID NO:329, SEQ ID

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.